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# THE SCHOOL JOURNAL

## A Monthly Journal of Education

Vol. LXXVII.

May, 1910

No. 9

OSSIAN LANG, Editor.

## Professional Improvement

Training schools, normal schools and colleges no doubt are giving more attention to the theoretical preparation of teachers than ever before. Practically, too, much is done to give to those desiring to teach, a fair start in the handling of the daily problems of school government and instruc-Yet, with all this, there is a general feeling that the teachers who have come into the schools in the past ten years do not take any serious interest in the study of education as a science and an art.

Of course, it is difficult to prove any general statement relating to a country as large as ours. What is true of one locality does not always apply to another. Still, the indications are, taking the country as a whole, that there has been a falling off of interest in serious, philosophical continuation studies of pedagogy and psychology. This may be the fault of the literature on these subjects. No doubt it is. But whosesoever fault it is, the fact

remains unchanged.

Much fun was made of the efforts, in the early nineties, to interest teachers in the Herbartian pedagogy. Apperception, correlation, formal steps and all the psychological terms involved in these ideas were held up to scorn by those whose slumbers had been disturbed by the invasion. Nevertheless, one thing was accomplished: The technical terms that were employed possessed fixed meanings that could not be guessed at, nor was reference to the dictionary of much help. Intelligent participation in the discussions necessitated previous study. Inner consciousness could not supply a knowledge of the Herbartian system. That had its advantages.

Psychology and the history of education were accorded greater prominence on programs of teachers' meetings than ever before or ever since. Child study came forward at about the period the interest in these technical subjects had reached its highest point. Here gush and fertility of imagination and a priori judgment found an opportunity to share the limelight with scholarly investigators without appearing at a disadvantage before aver-

age audiences.

Then came the dissemination of an iconoclastic statement by Professor Muensterberg, to the effect that psychology had little help to offer to the teachers. Here was the opportunity of the irritated empiricists. They had known right along the foolishness of expecting any advantage from a knowledge of psychology and pedagogy. The little onecandle power of their own experiences was sufficient to light up their paths. The reaction set in, and a diminishing of interest in the theory and art aspects of education was the immediate result.

The change is traceable in the character of examinations for teachers' certificates. It is strikingly shown also in the subscription lists of educational periodicals of a solidly professional character. Educational Foundations, the only periodical devoted wholly to the systematic presentation of pedagogy and subjects elucidating it, had a sub-

scription list of well-nigh sixty thousand when the interest in the Herbartian pedagogy had reached its highest point. Of this number only about ten per cent remain at the present time. Other professional periodicals which gave serious attention to technical discussions have either disappeared altogether, or changed their characters completely.

What is to be done about it? Referring to the present as a transition period is an evasion of the problem. To say that a great leader is needed to stir the consciences of the school folk and place before them a plan of education that will set hearts afire, comes somewhat nearer to definiteness. But where is the leader? The attractions offered in the fields of industry and finance have lured away from pulpit and school most of the men possessed of the rare gifts of leadership and resourcefulness. Waiting for a leader leaves present conditions in a most unsatisfactory state. What is to be done now?

Dr. Maxwell showed, a few years ago, how the study of theory, art, and history of teaching can be given an immediate impetus. Teachers desiring an advance of salary were advised that they must pass a technical examination revealing the candidate's acquaintance with current pedagogical discussions and methods of teaching and manage-The edict set several thousand teachers to work, and accomplished in a day what argument, and persuasion, and urging had not been able to bring about in a score of years. A similar plan was followed by many of the county superintendents in Pennsylvania, who based their examina-tions of teachers upon technical studies previously recommended.

It were better, of course, if teachers would undertake such studies without official compulsion. But it is unquestionably a more satisfactory condition to have teachers read and search to grow in professional efficiency than to be contented to grub away in the narrow ruts worn by local tradition.

The welfare of the children at school is of higher consequence than the comfort of the teachers. Nor need there be any discomfort for teachers. The need there be any discomfort for teachers. The majority will work of their own accord. endeavors are worthy of practical commendation. If those who do nothing to earn advancement are preferred over those who labor conscientiously, the latter will naturally feel discouraged.

Let the promotions be accorded to those who labor conscientiously to increase their professional efficiency. That will solve the problem.

#### **Fetishes**

There are savages in Central Africa so benighted that we send missionaries to them to teach They know nothing of the line which we have drawn between man and beast. They look upon dogs and birds and trees and stones as beings like themselves. They firmly believe that monkeys could talk if they only wanted to, but that they are too lazy to learn.

And that reminds me that I have met teachers who insist that the small boy who does not readily grasp a new idea is a lazy, good-for-nothing criminal. The African savage probably regards the missionary as an ignoramus who does not know monkeys, much as the savage teacher stoutly maintains that other people do not know her small boys. The monkey is not too lazy to talk. The African savage is in need of enlightenment.

The African savage is a fetish-worshipper. True! But even here we can gather a-suggestion for ourselves. While our savage brother regards the fetish as his god, he is by no means wedded to the fetish forever. He may add other fetishes to help and protect him on occasion. And here is

a practice still more to the point: He will dismiss a fetish as soon as it appears to him that he is deriving no particular benefit from its worship, even tho that fetish be the Jip-haw method of teaching reading, or weaving tiny strips of paper! Go to the poor savage, thou fad worshipper, and learn.

the poor savage, thou fad worshipper, and learn. What a stupid world this would be if there were no fads! I have my fad, and I am glad if you have yours. Now let us both agree to dismiss our fads when they are no longer worthy of our care, and then let us choose new ones. There are abiding things and there are fads. The former we must have, the latter we may have. Our African brother has only fads. That is why we send missionaries to him to save his soul.

# Cheerful Confidences

You, too, have healing thoughts and inspiring ideas which would brighten the days of school-masters and mistresses. Might write them out and contribute them to the brothers and sisters of the profession. Send them to the Cheerful Confidant. Care THE SCHOOL JOURNAL, New York.

Getting a Fresh Start

I had an idea that dependence on emotional states was largely a teacher's weakness (I still think a good deal of it is), but I saw an instance of it in a man of recognized eminence and ability not long ago. I was in Washington. I have a relative who is secretary to one of the big men there. "The boss has given up and gone home," he said. "He wasn't sick but he got in wrong. Two or three letters of the wrong sort came in. He dictated half a dozen answers to each and tore them Then he fussed with the work on his desk but didn't really do anything. All the time he was getting crustier and snappier and more ashamed of it. Do you know what he'll do? He'll go home and listen to his wife run the sewing-machine. He'll sit and look at her face the whole evening. To-morrow he'll begin bright and early and do two days' work in one, with everybody feeling fine all around him."

What a lucky schoolman it is with a wife like that, a long look into whose calm and sympathetic face will heal the distractions of a day into which one started wrong!

What a lucky class it is which has a face like that to look at!

MILTON WELLS.

#### The Light in the Face

I once saw a hundred little slum children of New York going thru some pretty gymnastic exercises. Before they began I was saddened by the old look upon many of the pinched and drawn faces. A young woman came and took her position before them. She was Miss Elizabeth Burchenal. Instantly these youngsters brightened as the electric lights had been turned upon them. Every time this teacher smiled, the illumination was mirrored in the hundred faces.

was mirrored in the hundred faces.

I have seen a child lost in a crowd, with face anxious, fearful, terrified. I have seen her father appear and the sunshine break thru the clouds of trouble. Then everybody smiled,—the thing is catching.

There seems to be an instinctive reading of the teacher's face possessed by children. No sourhearted man or woman seems able to deceive them. The new teacher, fearful of all sorts of imaginary trouble, telegraphs unconsciously her dread by unintentional movements of the muscles of the face.

The whole pack of young barbarians prepare for war. The confident woman possessed of some definable social power casts a friendly eye over the group and has it captive at a glance by her

"Soft smiles, by human kindness bred."

If I were the head of a school that purported to teach teachers their trade, I would pass out hand-mirrors sometimes, and ask the would-be school-ma'ams to practice the kind of expression suited to present to children who are compelled by compulsory education laws to look at one woman's face twenty-five hours a week. RANDOLPH GRIFFIN.

#### Admirable Under Criticism

Emerson's advice was, "If one corrects you, kiss him." This, literally followed, would subject you and the superintendent to embarrassing charges, but you need more of the spirit suggested. The teacher's worst clog is conceit. Art students will pay for criticism, often of the most brutal kind. Dramatic students and chorus girls endure a frankness of correction of which a teacher has no idea. No man or woman is good enough or able enough to dodge, avoid or throw away the corrective benefit that comes from criticism, whether sympathetic or otherwise.

Someone has spread the idea that there is an unwritten law that no teacher shall be corrected before a class. Strikes me like a wrong twist. Criticism ought to be welcome before a class or behind a class. So long as teachers are so ready to correct their scholars before everybody, they strain the point unnecessarily when they make criticism of themselves a matter of such shame that it must be private. Few things have harmed teaching more than the assumption of infallibility. No children of any sense admire a man or woman who assumes to know everything. No teacher can really care much for improvement if he is unwilling to get it from suggestions in season and out of season.

I heard a principal of a Philadelphia school say to an assembly full of pupils: "There are facts that I have learned wrong, there are words I never learned to pronounce, perhaps never learned to spell. I don't know what they are. If I did, I would correct them. Any scholar or teacher who hears me make a mistake performs a courteous and friendly act by telling me." Pretty sensible, isn't it? Some day that man may move along so far as to do as department stores, railroads and other would-be public servants do: send out to the patrons requests for criticism of the service. I never yet heard of a public school humble enough to do that. But such a thing is not beyond the limit of possibility. WILLARD E. HITCHCOCK.

#### for May Memory Gems

(Saturdays and Sundays omitted)

MAY 2

Jack, when ye hae nothing else to do, Ye may be sticking in a tree; it will be Growing when ye're sleeping.

—HIGHLAND LARD OF SCOTLAND.

MAY 3

With the planting of a tree a blessing Comes to him who drops a seed. -ARABIAN PROVERB.

MAY 4

I sit where the leaves of the maple, And the gnarled and knotted gum Are circling and drifting around me, And think of the time to come.

-ALICE CARY.

MAY 5 He who plants a tree, He plants love.

-LUCY LARCOM.

MAY 6 Many a traveler in the heat Finds the cooling shade most sweet. -Selected.

MAY 9

If Mother Nature patches the leaves of trees and vines,

I'm sure she does her darning with the needles of the pines. Selected.

**MAY 10** 

Now blossom all the trees, and all the fields,

And all the woods their pomp of foliage wear. BEATHE.

MAY 11 If thou would'st read a lesson that would keep

Thy soul from fainting and thy soul from

sleep, Go to the woods and hills.

-Longfellow. **MAY 12** 

O hemlock tree, O hemlock tree, How faithful are

thy branches! From the German.

**MAY 13** And still the pine, flat-topped, and dark and tall,

In lordly right predominant over

-LEIGH HUNT.

**MAY 16** Summer or winter, day or night,

The woods are ever a new de-

-R. H. STODDARD.

**MAY 17** 

Then rears the ash his airy crest, Then shines the birch in silver rest, And the beech in glistening leaves is drest, And dark between shows the oak's proud breast, Like a chieftain's frowning tower.

Among the beautiful pictures That hang on memory's wall, Is one of a dim old forest That seemeth best of all.

-ALICE CARY.

**MAY 19** And I think I hear him say, Children, will you plant a tree Every Arbor Day for me?

-Selected.

**MAY 20** O for a seat in some poetic nook, Just hid with trees and sparkling with a brook. -LEIGH HUNT.

**MAY 23** Heaven and earth help him who plants a tree, And his work its own reward shall be. -LUCY LARCOM.

> **MAY 24** I hear the wind among the trees Play celestial harmonies. -LONGFELLOW.

> > **MAY 25**

Plant thou a tree whose griefless leaves shall sing

Thy deed and thee each fresh, unfolding spring.
—EDITH M.

THOMAS.

**MAY 26** 

Never lay your ax to the root of a tree

Till you've planted another to take its place.

-LILLIE SOUTH-GATE.

**MAY 27** 

Give me of your note, O Tamarack!

Of your fibrous roots, O Larch Tree! -Longfellow.

**MAY 31** 

The birch, the myrtle and the bay

Like friends did all embrace;

And their large branches did display. To canopy the place.

DRYDEN.



Blackboard Design by G. H. Shorey



From the Laurel Octavo series, by premissions.

If the section between

# Practical Nature Study

By FRANK OWEN PAYNE

Frogs and Toads

The toad and the frog are particularly interesting creatures for study. They are so numerous, so easily captured, and they thrive so well in captivity that they may be observed with greater ease than almost any other creature.

Again their mode of development is interesting, and their metamorphoses may be clearly observed from egg to adult. In this respect the frog surpasses all other animals as an object for nature

Method: Go to some pond or slow stream early in the spring. This is the spawning season, and the mature animals may be seen pair-

ing at this time of the year.

The eggs, when laid, consist of great numbers of yolks imbedded in transparent jelly.

Frogs' eggs may be recognized by their dull green color, while those of toads are almost black. They may also be distinguished by the fact that the frog eggs are deposited in masses, while those of the toad are long strings of jelly in which the little black yolks are disposed at equal intervals.

Having collected the eggs, put them in an aquarium jar full of water in which there are some water plants. Place them in a shady place where they have plenty of air and no direct sun-

After a while the young tadpoles will be seen coiled up around the yolk mass, and little by little they may be studied and sketches can also be made. At last the tadpoles escape from the jelly which surrounds them, and they go swimming about like tiny fishes thru the water.

#### **OBSERVATIONS**

1. The frog begins its life as an egg. There is no shell covering the egg. The eggs are laid in masses. The mother does not brood the eggs.

2. The larva is called a tadpole or pollywog. It has a fish-like body. It breathes by gills which form tiny tufts on the sides of the head. It has no fins or gill-covers. It has a sort of sucking disk on the head by means of which it can attach itself to weeds or to the sides of the aquarium.

3. During development all important changes should be noted, such as the following: (a) The body grows quite rapidly. (b) The food is vegetable matter growing in the water. (c) The matter growing in the water. (c) The gills disappear. (d) The tail begins to thin out and shorten. (e) The hind legs develop. (f) The front legs shortly after appear. (g) About the time that the gills disappear the young tadpoles frequently come to the surface and swallow air, (h) The tail finally disappears and the frog is fully developed.

4. The adult frog possesses the fol-

lowing characteristics, easily seen by the youngest children:

(a) Skin moist and smooth.(b) Two pairs of legs, the hind legs being much the larger.

(c) The feet have no claws, and there are webs between the toes.

(d) Eyes have lids. They are very prominent. (e) There are no external ears, but the eardrum may be seen just back of the eyes.

(f) The frog is cold-blooded.
(g) The spots and various colors are of use to the frog in escaping from its enemies.

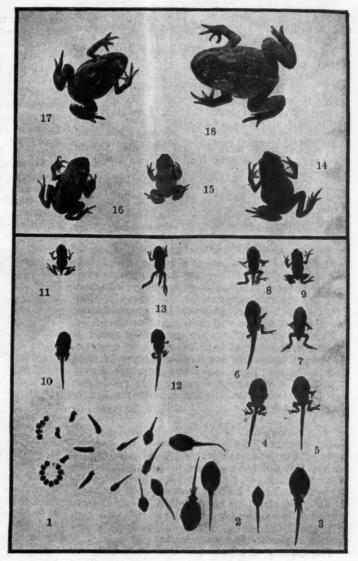


Fig. 115. Toad Development in a Single Season (1903).

1-18. Changes and growth, April to November.

15-18. Different sizes, October 21, 1903.

1-13. Development in 25 to 60 days.

9-14. Different sizes, July 30, 1903.

10-11. The same tadpole-11, 47 hours older than 10.

12-13. The same tadpole—13, 47 hours older than 12.

-From Cornell N.-S. Leaflets.

#### SUGGESTIONS

1. Compare the frog with its allies, the toad, tree toad, newt, salamander and mudpuppy.

2. Compare frogs with fishes as to covering,

mode of locomotion, etc.

3. Compare frogs with other higher animals as to shape, color, covering of the body, habits, food,

#### PRACTICAL APPLICATIONS

Frogs and toads are of great economic value. They devour vast quantities of insects and are thus a great benefit to agriculture. Toads are wonderfully adept in capturing insects. Many gardeners recognize this fact and do all they can to protect toads in order that bad insects may be removed from their gardens. Newts and mudpuppies are recognized as scavengers. In short, all this group of animals may be classed as useful. Tree-toads are equally valuable in helping to rid the trees of leaf-eating and wood-boring insects.

The hind legs of frogs are eaten and are esteemed a great delicacy. The flesh is white and is broiled or fried and served on toast as an

entree.

There are superstitions connected with toads

which ought to be dissipated.

(a) That toads are poisonous is a very old belief. Shakespeare refers to this superstition in Macbeth, when one of the witches puts into the caldron, "Toad that under the cold stone days and nights hath thirty-one, sweltered venom sleeping

(b) That toads have a jewel concealed within the head. Many a poor toad has been killed by

boys who expected to find such a jewel.

(c) That to touch a toad will cause warts to appear upon the hands. This is absurd. The writer has handled many toads without having experienced any such results.

#### Snakes and Turtles

Snakes and turtles belong to a class of animals known as reptiles. They are more highly developed creatures, and as they are quite common, they are desirable objects for nature study, altho few people will care to study living snakes and fewer still would be willing to handle them.

For the study of snakes the garter snake is most desirable. It is harmless and very common. An empty aquarium jar having a layer of sand and gravel about one inch deep and covered with a piece of wire netting makes a very good "ter-rarium" in which snakes and land-turtles can be kept for weeks.

#### **OBSERVATIONS**

(a) Snakes: Study the animal at rest. Make note of the long, slender body, its covering of scales, the difference between the scales which cover the back and those covering the belly. Observe the coloring and markings, which are wonderfully beautiful on most snakes. Note the absence of limbs, the peculiar glassy eyes, the nostrils and sunken ears. The mouth with its forked tongue can scarcely escape notice.

The manner of lomotion by the use of scales on the under side will be harder to discover unless the animal is examined with the hands. Feeding is seldom witnessed because snakes rarely eat in captivity, but if seen it is a most interesting sight, for the food is seized and swallowed whole, the jaws opening very wide to permit the entrance

of so large a portion. (b) Turtles: These are of two classes, land

turtles and water turtles.

The teacher should determine which kind he has, so as to know whether to keep it in an aquarium or a terrarium.

Land turtles may be recognized by their high dome-shaped shells, while the water turtles have a flatter shell. It is cruel to put a land turtle into an aquarium and try to make it live there. Some land turtles have beautifully marked shells, and in some forms the under side or breast-plate is so jointed that the animal can close up the shell like a box, and so protect himself from his enemies.

Examine a turtle of any sort. Notice the plates of which the shell is made, the break, eyes and powerful neck. Study the feet and notice the claws and scales covering the legs.

#### PRACTICAL APPLICATIONS

Snakes and turtles are of great importance. These animals are far more useful than is commonly believed. The value of snakes especially has been greatly underestimated. They destroy great quantities of harmful animals such as rats, mice, and insects. Their flesh is eaten to some extent, especially by uncivilized peoples.

Venomous snakes are, of course, to be classed as pests, and great numbers of cattle and useful

animals are killed annually by snakes of this sort.

The hawk-bill turtle, or "tortoise," is the source of tortoise-shell, which is so extensively used in the manufacture of combs, and various articles of

The big green turtle or "loggerhead" is eaten as a delicacy. It often weighs as much as 1,000

pounds.

The diamond-back turtle or "terrapin" is also greatly esteemed for food. Skins of various lizards are tanned and made into ornamental leathers, which are used for purses, bags, and fancy articles.

Alligator leather is made into the finest quality of satchels and traveling bags.



Fruit of the Lima Bean, Showing the Seeds in Place, Attached to the "Placenta"

[Drawn by a pupil of Frank Owen Payne, whose articles on Industrial Nature Study are now appearing in THE SCHOOL JOURNAL.]

"My Commencement"-no heart is so seared by time as to have forgotten the eventful day when he was graduated from high school, college, or professional school. For weeks already past the girls and boys whose "commencement" will occur in June, 1910, have been thinking and planning for the day. The clever originator of the book "My Commencement" knew how deeply this charming volume, with its rosebud cover and rose-bordered blank pages, would appeal. It has spaces for class autographs, class history, class prophecy, colors, flower, yell, speeches, prizes, etc., and when filled in it will be a treasure to be kept for life. And now is the time to buy it-don't wait till commencement day. Price, \$1.50. (Dodd, Mead & Company, New York.)

# Grammar School Course in Literature

By HARRIET E. PEET, State Normal School, Salem, Mass.

### Selections From Wordsworth

LIST OF POEMS

#### PIPPH VEAD

The Sparrow's Nest
To a Butterfly
The Pet Lamb
My Heart Leaps Up
The Kitten and the Falling
Leaves (abridged)
Written in March
Lucy Gray
A Cottager to Her Infant
(by Dorothy Wordsworth)
There was a Boy
The Daisy
The Cuckoo
The Solitary Reaper

#### SIXTH YEAR

The Daffodils The Reveries of Poor Susan

#### SEVENTH AND EIGHTH YEARS

To the Skylark
Nutting
She Was a Phantom of
Delight
Michael

The World Is Too Much
With Us
Sonnet on Milton
Selections from Tintern
Abbey

The greatness of any poet consists of his degree of originality. He must say something new, or something old in such a way that new emotions are felt or a new vista of experience is opened. William Wordsworth came at a time of transition of thought. He was the climax and the reaction to the Romantic movements, and, because thru it he took attitudes particularly his own, it is that he is great. What is his particular contribution to literature? What new feeling toward life is gained thru him? What can be got from him by our school children?

To understand Wordsworth, we must understand in at least a cursory way the movement to which he belonged; the beauties of the English Lake District where he lived; and his own ideal of poetry.

To sum up in a paragraph that which needs several volumes to understand, the Romantic movement might be defined as a movement toward the substitution of feeling for reasoning as a guide for conduct. If you obeyed what your heart dictated, what instinct prompted or even what your own wayward impulse suggested, you were living according to nature and doing what was right. Liberty and Back-to-nature was its cry. The French Revolution and pessimism and recklessness such as Byron and Shelley knew, were its immediate result; a more human outlook and a greater respect for each individual human life its final outcome.

Wordsworth, after his visit to France as a young man, was the exponent of Romanticism only in its more conservative aspects, the value it placed upon all life, humble or high, and its passion for the beauties of nature. He differed widely from Byron and Shelley in placing the voice of duty before that of feeling.

Stern daughter of the Voice of God!

O Duty! if that name thou love,
Who are a light to guide, a rod
To check the erring, and reprove;
Thou who art victory and law
When empty terrors overawe;
From vain temptations dost set free,
And calm'st the weary strife of frail humanity!

—Ode to Duty.

His attitude toward humble life is perhaps best shown in his theory of poetry, published in 1798 as an introduction to the famous "Lyrical Ballads." He believed that there were as many themes for poetry in commonplace lives and surroundings as in the world of the supernatural or in the realm of the imagination, and that the language of poetry should be such that even the most humble people could understand it. Coleridge, with whom he published the "Lyrical Ballads," held the opposite view. The result was "The Ancient Mariner," with its charm of the supernatural and its marvelous setting and language by Coleridge, and ballads of shepherds and humble people told with the greatest simplicity by Wordsworth.

Wordsworth's love of nature can be understood only by those who have seen the "fells," the magic "tarns," the tumbling "forces" and the rocky "glylls" of the Lake region in England, or by those who have lived close enough to mountains, ponds, waterfalls and gorges in some other part of the world to know them intimately. The English Lake District is a miniature mountainous region, impressive because you can get so near to the mountains and know them all so well. Carlyle has told us something of the sensation that can be had from one of the mountains.

A hundred and a hundred savage peaks, like giant spirits of the wilderness; there in their silence, in their solitude, even as on the night when Noah's Deluge first dried. Beautiful, nay solemn, was the sudden aspect to our Wanderer. He gazed over those stupendous masses with wonder, almost with longing desire; never till this hour had he known Nature, that she was One, that she was his Mother and divine. . . . . . . a murmur of Eternity and Immensity, of Death and of Life, stole thru his soul; and he felt as if Death and Life were one; as if the Earth were not dead, as if the spirit of the Earth had its throne in that splendor and his own spirit were therewith holding communion.

It was in this region that Wordsworth spent almost all of a very long life, a life literally spent out of doors in contemplation of life and nature. The beauty of "mute insensate" things, of rocks and rills were his—not as beauty, but as the voice of the Mystery of life.

And so I dare to hope. The changed, no doubt, from what I was when first I came among these hills; when like a roe I bounded o'er the mountains, by the sides Of the deep rivers, and the lonely streams, Wherever nature led: more like a man Flying from something that he dreads, than one Who sought the thing he loved. For nature then (The coarser pleasures of my boyish days, And their glad animal movements all gone by) To me was all in all-I cannot paint What then I was. The sounding cataract Haunted me like a passion; the tall rock, The mountain, and the deep and gloomy wood, Their colors and their forms, were then to me An appetite; a feeling and a love, That had no need of a remoter charm, By thought supplied, nor any interest Unborrowed from the eye.

-Tintern Abbey.

This is what nature was to Wordsworth as a boy. As a man the experience was even more intense—the same that Carlyle felt from the mountain.

#### And I have felt

A presence that disturbs me with the joy Of elevated thoughts; a sense sublime Of something far more deeply interfused, Whose dwelling is the light of setting suns, And the round ocean and the living air, And the blue sky, and in the mind of man; A motion and a spirit, that impels All thinking things, all objects of all thought, And rolls thru all things. Therefore am I still A lover of the meadows and the woods, And mountains; and of all that we behold From this green earth; of all the mighty world Of eye, and ear-both what they half create, And what perceive, well pleased to recognize In nature and the language of the sense, The anchor of my purest thoughts, the surmise, The guide, the guardian of my heart, and soul Of all my mortal being.

-Tintern Abbey.

Wordsworth is great because he came as a "healing voice" to England in time of distress, the voice that pointed out duty as the road to right living. He is great in his simplicity, his high-minded morality and his mystic, deep, idealistic attitudes toward nature.

But perhaps his greatness lies even more in a loftiness of spirit that is Miltonic in character. He is at his best in the great Ode.

And O ye Fountains, Meadows, Hills, and Groves, Forbode not any serving of our lives!
Yet in my heart of hearts I feel your might;
I only have relinquish'st one delight
To live beneath your more habitual sway:
I love the brooks which down their channels fret Even more than when I tripp'd lightly as they;
The innocent brightness of a new-born day

Is lovely yet;

The clouds that gather round the setting sun Do take a sober coloring from an eye That hath kept watch o'er man's mortality; Another race hath been, and other palms are won, Thanks to the human heart by which we live, Thanks to its tenderness, its joys, and fears. To me the meanest flower that blows can give Thoughts that do often lie too deep for tears.

It is an appreciation for nature, a love for humble things, a high moral sense, a reverence for the mystery of life, and a lofty spirit which we would communicate to the children thru Wordsworth, but we would remember that there are depths to which the children cannot go, and attitudes of mind which would seem tiresome to them. Great care must be taken in the selection of poems so that only those are given which the children can learn to love.

The younger pupils will enjoy the "Sparrow's Nest," the "Kitten and the Falling Leaves," the "Pet Lamb," "Lucy Gray" and other poems of a similar character.

The "Sparrow's Nest" will be enjoyed for the tenderness toward the "bright blue eggs" and the ricture of child life so full of gentleness and love. "Lucy Gray" is a tragic ballad dominated and relieved by the character of the child so full of elf-like charm and beauty that she is immortal in the memory left behind her. The mystery and the play of fairy are delightful.

Yet some maintain that to this day She is a living child; That you may see sweet Lucy Gray Upon the lonesome wild.

O'er rough and smooth she trips along, And never looks behind; And sings a solitary song That whistles in the wind.

The "Pet Lamb" has somewhat the charm of both poems—tenderness toward nature and a subtle character sketch of an unusual little girl.

The older children will enjoy the "Daffodils," the "Solitary Reaper," the "Reverie of Poor Susan," one or two of the famous sonnets and some of the selections from different poems which show Wordsworth's out-of-door experiences and his intense love of nature. The "Daffodils" is loved for its exquisite imagery and its bright, changing rhythm; the "Solitary Reaper" for its simplicity, picturesqueness and its echoes of far-off things; the "Reverie of Poor Susan" for the story it suggests and its striking contrast of the home of contentment in the country with the poverty and hopelessness of the great city; "There was a Boy," "Nutting" and parts of "Tintern Abbey" give us Wordsworth as a boy; and "Michael" gives us the lonely life of a shepherd.

### Miss Harris Resigns

The pendulum has begun to swing backward at Rochester, N. Y. There was a time when the schools of that city were counted among the worst governed in the country. The awakening came and an era of progress was ushered in. The good work accomplished became known far and wide. Educational visitors included Rochester in their itineraries, and spoke with enthusiasm of many good things seen in the schools.

Meanwhile the spoils politicians lay low, biding their time. Some months ago they saw their opportunity. Now the indications are that there will be a reversal of policies.

The primary grades will probably be the first to suffer. The excellent construction (or expression) work organized under the leadership of Miss Ada Van Stone Harris has already been attacked. The sand-table work and clay-modeling have been abolished altogether. If the intention was to strike a blow at Miss Harris they certainly succeeded. Her whole heart was in the schools which she had served faithfully and with extraordinary efficiency for nine years past. She naturally could not be expected to submit silently to the inauguration of reactionary measures making it impossible for her to keep the schools up to their former high standard. She resigned, on April 16th, her position as assistant superintendent of the Rochester schools.

Miss Harris has an enviable reputation as a supervisor of primary schools and kindergartens. She has repeatedly spoken for national educational organizations, and is much in demand as an instructor at institutes and summer schools. In Michigan, Minnesota, New Jersey and New York, wherever she has labored, her leadership has found immediate recognition. Miss Harris was called to Rochester for the express purpose of introducing and organizing the work for which she is now criticised by a changed administration of affairs. Some day Rochester office-seekers will learn that it is poor politics to use the schools for log-rolling. If in their city it is not yet recognized as such, so much the worse for Rochester.

# Government of the United States

By ISAAC PRICE

#### Commerce

The third very important power granted to Congress of the national government is that regarding the regulation of trade and commerce. The specific power is

The Congress shall have the power to regulate commerce with foreign nations, and among the several States, and with the Indian tribes. Art 1, Sec. 8, Cl. 3.

Prior to the adoption of the Constitution the several States possessed the power individually; and it was their conflicting laws leading to petty commercial warfare among themselves that led to the panicky condition in the thirteen States and finally to the Constitutional Convention. Accordingly, when this matter was taken up for consideration there was no opposition to the total surrender of the power regarding this to the new national government. It was an innovation that was welcomed by all. The interpretation of this clause has, however, given rise, at times, to the most violent discussion of the powers of Congress. It has led to an immense amount of litigation, until the Supreme Court, in several famous decisions, decided that this power is so broad that it includes not only the exchange of merchandise but the transportation of this merchandise in its amplest sense.

Under the power to regulate commerce, for example, Congress has provided for the improvement of harbors, for building piers and breakwaters, for erecting an astronomical observatory, for making coast surveys. It has adopted laws regulating navigation, the registry of vessels, the licensing of pilots, immigration, quarantine, and a host of other subjects. None of these can be regarded as acting directly upon commercial transactions. They affect commerce only by way of making it safer and more profitable, or by adding to the facility with which it may be carried on.

Under this law Congress has adopted laws governing the registration of vessels built in American shipyards, and granting to these exclusive rights to engage in the enormous coastwise trade, a privilege that is absolutely denied to ships under foreign registry. Further, an additional tax has been laid on the tonnage of all ships under foreign registry. Ships built in the shipyards of other countries are required to show clearance papers of the ports from which they arrive. These papers show that all the harbor regulations have been obeyed. Ships engaged in coastwise trade do not come under these requirements.

To aid in the foreign commerce of our country, the government maintains in every large and important seaport consuls or consular agents, commercial agents and the consul-general to whom all the preceding report. They are the representatives of the government in all commercial relations; they report on all matters that might interest the manufacturers and shippers in the country; they report on all new inventions and in general tend to keep the nation informed of the commercial and manufacturing progress of the countries to which they are sent.

#### INTERSTATE COMMERCE

The interpretation of this term has brought the matter before the Supreme Court on several occasions, always resulting in broadening and am-

plifying the definition of this term. It includes all that traffic carried between and among the States, all inland traffic, whether by rail or on navigable streams, all coastwise trade and that vast trade thru the Great Lakes.

Thru the building up of the railroad systems and great corporations a number of evils crept in. "Pooling" agreements, secret rebates to great corporations, secret agreements with shippers of large quantities of freight—all these tended to increase the passenger and freight rates, stifle competition and bring a large number of business firms to the verge of bankruptcy. So great had these evils become that, in 1887, the "Interstate Commerce Act" was passed. This law, with the numerous amendments since added, required, among other things, that the freight and passenger tariffs shall be published, that they shall be just and equable, prohibiting discrimination between persons or corporations or localities in the matters of charges and shipments, prohibiting the granting of rebates and forbidding all pooling arrangements. An "Interstate Commerce Commission" of five members was created to superintend the carrying out of the law. The following is a copy of an order of the commission in a case brought before it on the complaint of a shipper:

W. O. Mitchell v. Atchison, Topeka & Santa Fe Railway Company; Chicago, Rock Island & Pacific Railway Company, et al.

The rate charged on wheat was found to be excessive, whereupon the following order was issued:

Upon the foregoing report-

It is ordered, That the defendants, Atchison, Topeka & Santa Fe Railway Company, et al., be, and they hereby are, notified and required to cease and desist, on or before the 1st day of September, 1907, from charging, demanding, collecting or receiving for the transportation of wheat in carloads from Oklahoma City, in the Territory of Oklahoma, to Gainesville in the State of Texas, their present rate of 28½ cents per 100 pounds.

It is further ordered, That said defendants be, and they hereby are, notified and required to establish and put in force on or before said 1st day of September, a rate of not more than 20 cents per 100 pounds and apply that rate to the transportation of wheat in carloads over their respective lines of railway from said Oklahoma City to said Gainesville, during a period of at least two years from and after said 1st day of September.

#### NATIONAL BANKRUPTCY LAWS

In another respect may Congress be said to exercise power over the regulation of interstate commerce. The Constitution provides that it shall have the power

to establish . . . . . . uniform laws on the subject of bankruptcies thruout the United States. Art. 1, Sec. 8, Cl. 4.

It has always been recognized that credit is the basis of modern industrial and mercantile life; and that, in order to carry on large transactions, credit must be extended to citizens whether in the same or in other States. It very often happens that thru business reverses of one sort or another merchants are unable to meet their obligations.

No intent to defraud the creditors is shown. Recourse to the law would bring very little satisfactory result, inasmuch as all the property of the

bankrupt has been lost. This fact has always been recognized among all the great commercial nations, and at one time or another during their existence laws relieving the honest bankrupt were put on the statute books. In England this was the case. Several of the colonies had similar laws. Accordingly, the framers of the Constitution inserted the foregoing provision. Congress has, on four occasions, during our national existence, adopted laws of this kind, in 1800, 1841, 1867 and the one in present use in 1898. Most of the States have separate bankruptcy laws, but the national bankruptcy act superseded all of these; tho in a very few minor cases the State laws are valid. The procedure of a bankrupt will be taken up in a later article.

#### COINAGE

The power of Congress in the matter of coinage is

To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures. Art. 1, Sec. 8, Cl. 5.

At the time of the adoption of the Constitution several kinds of coin were in use. Each colony and State had the power to coin and circulate the money it wished to issue and fixed its value. Coins of one value in one State did not necessarily possess the same value in another colony or State. The Spanish dollar and the English shilling, with its smaller coins, were largely in use, as well as the paper money issued by the colonies and States. To arrange a satisfactory medium of exchange and standardize the value of the currency, this power was granted to Congress.

By this, Congress is the sole authority in declaring the money to be accepted in payment of just and lawful debts; that is, declaring what is legal tender. It also has the sole power to issue moneys. The money so issued is actually coined at the mints. The five mints are at Philadelphia, established in 1792, at San Francisco, New Orleans, Denver and Carson City. In addition to these, assay offices are maintained at several places thruout the United States, where gold and silver may be brought to be tested for their fineness and purity.

The metals used in coining are gold (double eagle, eagle, half-eagle, quarter-eagle), silver (dollar, half-dollar, quarter, dime), nickel (five-cent piece or nickel) and copper (cent). To supplement these paper money has been issued in denominations from one dollar to ten thousand dollars, payable in silver or in gold according to the law authorizing the issue. This paper money is known as banknotes, treasury notes, gold certificates, silver certificates. National banks are authorized to issue a certain amount of the banknotes, on payment of a percentage for this privilege and the deposit of United States Treasury Bonds to protect the receivers of these notes.

The United States, thru the Treasury Department, also fixes the value of foreign coins.

#### COUNTERFEITING

The maintenance of the parity or equality of the value of the national coins, that is, at the value at which they are issued, depends largely upon the faith of the public in the power of the government to redeem its obligations, and the assurance that the money in circulation is that issued by the government. This prompted the insertion of the power regarding the punishment of counterfeiting. The public faith in the genuineness of the securities and coins of the United States must at

all times be maintained. When there is the least doubt as to such genuineness, then the value of the securities and money will fall below par, as happened during the Civil War and for a long time after

Congress has, by appropriate laws, made the issuance of coins and securities of the United States, without authorized permission, a crime, with very severe penalties. The law declares counterfeiting to consist of the manufacture, putting into circulation or having in one's possession with intent to circulate the coins or securities of the na-It makes no difference whether the coins so made or circulated are of equal value or contain more gold than the legal coins. The securities of the nation are the bonds, paper money, stamps, postage and revenue stamps having a monetary The law also forbids the counterfeiting of coins and securities of foreign nations. To make the punishment doubly sure all the States have adopted the national laws regarding counterfeiting. The federal government will stop at no cost to prevent counterfeiting.

#### WEIGHTS AND MEASURES

Weights and measures enter so largely in the purchase and sale of the articles of commerce, that the framers of the Constitution realized the necessity to grant this power exclusively to the national government. Tho this is the fact, the federal Congress has availed its opportunity but little, and has not standardized the weights and measures to be used thruout the country, leaving it to the individual States to declare the legal measures within their territory.

It has, however, adopted the English systems of weights and measures and made them compulsory for the customs service. Attempts have been made to compel a uniform system in the country, but they have generally been unsuccessful. The metric system, so general thruout the European countries and used by all scientific societies, has been adopted by several of the large manufacturing concerns engaged in international trade. The necessity for a uniform system is so apparent as to need very little discussion here.

#### Quotations for Memorial Day

Sleep, soldiers, still in honored rest Your truth and valor wearing. The bravest are the tenderest— The loving are the daring.

He liveth long who liveth well,
All other life is short and vain.
He liveth longest who can tell
Of living most for country's gain.

Waste not thy being. Back to Him Who freely gave it, freely give. Else is that being but a dream—
'Tis not to be, and not to live.

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# Present Day History and Geography

Notes of the News of the World

A tariff Agreement with Canada was reached on March 30. President Taft signed a proclamation admitting Canadian products to the minimum rates just before the date on which the maximum rates would otherwise have taken effect under the present tariff law.

The strike at Philadelphia was formally called off on March 27. A few days before this, the carmen rejected terms which had been agreed upon by the president of the International Carmen's Union and representatives of the company, and voted to continue the strike until all their demands were granted.

The cost of living is less in Canada than in the United States. The Massachusetts commission on the subject found in Ottawa and other Canadian cities that foodstuffs and household commodities bore a lower tariff rate there and prices are lower in consequence.

The United States Department of Agriculture has issued a cook book. Thirty thousand persons have sent for it and the requests continue. People wish to know how cooking ought to be done. At first 5,000 books were thought to be enough, but the department found this estimate far too small.

The Yerkes art sale in New York realized the largest sum ever secured for art at one time in America, \$2,034,450. Van Ostade's "Dancing in the Barn" was sold for \$24,000; Guardis' "Grand Canal at Venice," for \$20,000; Andreas de Solario's "The Annunciation," \$11,300; a Potter land-scape with cattle and figures, \$13,500; Murillo's "Madonna and Child in Glory," \$1,700; a Botticelli, \$1,550; an Ardsbil mosque rug, \$35,000, and a Bagdad carpet of the sixteenth century, \$19,600.

Edwin G. Cooley, who resigned a year ago as superintendent of public schools in Chicago, to become president of D. C. Heath & Co., has resigned the latter place and signed a contract with the Chicago Commercial Club for a year. He is to go abroad in behalf of the club to study European systems of industrial and commercial education and the training of teachers. His report is intended primarily for the use of the public school system of Chicago under the auspices of the club.

The officials of the Baltimore & Ohio Railroad have come to the conclusion that men do better work than women, and on this account will take no more women into their employ. None of the women at present working for the railroad will be dismissed.

It has been estimated that in the average a woman stenographer does 30 per cent less work than a man in the same position, also doing the work less carefully and less accurately. The women employed by the Baltimore & Ohio are stenographers, clerks, and telegraph operators.

A report from the Canadian government states that within the past eleven months more than 86,000 immigrants have crossed into that country from the United States.

The increasing demand for railroad ties is threatening the destruction of Connecticut forests. It is said that owners of portable sawmills have, at times, frightened the farmers into selling their chestnut woodlands by using the chestnut tree plague.

The Pennsylvania Railroad has increased by 6 per cent the pay of all its employees who have been receiving less than \$300 a month. About 175,000 men are benefited.

The greatest speed ever attained by a vessel in the United States navy is something over 36 miles an hour. This is the record made by the torpedo boat *Reid*. The boat attained this speed and kept it for four consecutive hours, off the coast of Florida.

The blessed with more fertile soil and more favorable climate, the United States produces less wheat per acre planted than England, Germany, or Holland.

During the past year the population of Germany has increased by 896,000 persons, to 63,886,000, according to official statistics.

Professor Leschetizky, the eminent pianist, still teaches at his home in Vienna, tho he is nearly 80.

### Recent Deaths

Just as THE SCHOOL JOURNAL is going to press, the news is received that Samuel L. Clemens, our own beloved "Mark Twain," has died. A fuller notice of his life and work will be given in these columns next month. His death occurred on April 21.

Alexander Agassiz, son of the great naturalist, Louis Agassiz, and himself a man of scientific attainments, died on the steamer *Adriatic*, bound from Southampton to New York, on March 28, in his 75th year.

Mrs. Allan MacNaughton, of New York, known as the writer, Myra Kelly, died on March 31, at Torquay, England, at the age of 30 years. Mrs. MacNaughton was the daughter of Henry George's physician, Dr. James T. Kelly. It was as a public school teacher in New York that she came across the material out of which her stories were constructed. Among her books are "Little Citizens," "Isle of Dreams," and "Wards of Liberty."

Associate Justice Josiah Brewer, of the Supreme Court of the United States, died suddenly at Washington, on March 28. He was the son of missionaries, and was born in Smyrna. He served as judge of the Supreme Court of Kansas from 1870 to 1884; as judge of the United States Circuit Court from 1884 to 1889; and since 1889 as Associate Justice of the Supreme Court.

Charles Sorague Smith, founder and manager of the People's Institute of New York, the public meetings of which at Cooper Union are of national renown, died suddenly of pneumonia on March 30 at the age of 57 years.

#### Cabin Boy to Napoleon

His name is William Johnstone, and he is 106 years old. He is in a home kept by the French Sisters. In 1815 he was cabin boy in H. M. S. Northumberland, the British warship that took Napoleon to St. Helena. For some time afterwards he remained on the island as one of the personal attendants of the fallen emperor, and one of his choicest possessions to-day is a devotional book with Napoleon's writing in it.

His story has been looked up by the Sisters, and they have no doubt that it is genuine. At any rate, a William Johnstone was cabin boy in the Northumberland on the occasion of that

voyage.

#### The Speaker and the House

For many years, says the Youth's Companion, the orders of business in the National House of Representatives has been controlled by the committee on rules, appointed by the Speaker, the Speaker himself being chairman. There have been many complaints against the system, but until the present session of Congress no serious attempt has

been made to change it.

A long and bitter struggle, continuing thru three days, March 17-19, and including one twenty-eight-hour session of the House, brought about a change in the practice of the House, thru the adoption of a new rule, providing for the election of a committee on rules, the Speaker being expressly excluded from membership in it. The contest began with the introduction of a resolution by Mr. Norris of Nebraska to amend the rules by providing for a committee on rules of 15 members, to be elected with a regard to geographical distribution, eliminating the Speaker. Later this was amended to reducing the membership to 10, six to be chosen from the majority and four from the minority, without regard to geographical distribution.

"Insurgent Republicans" combined with the Democrats to secure the adoption of the new rule. On a test vote, on a motion to lay on the table an appeal from a ruling of the Speaker, the motion was lost by a vote of 164 to 181, 35 "insurgents" voting with the Democrats in the negative. The vote on the adoption of the amended Norris resolution was 191 to 155. After this vote the Speaker announced that two courses were open to him—to resign and permit the new combination to elect a Speaker, or to entertain a motion declaring the office of Speaker vacant. He refused to resign, but expressed his readiness to entertain the motion suggested. Mr. Burleson of Texas offered the resolution; but the House voted against it, 191 to 155, all but eight of the "insurgents" voting with their party against the deposing of the Speaker.

#### A Bank for Schoolboys

A teacher in Class 8A2 of Public School 77, New York City, suggested the idea of organizing a bank in the school, says Collier's Weekly. The boys were with him from the start. A long-neglected lumber-room, which has done service in school for a good many years as a repository for discarded furniture, was thoroly cleared out, and fixtures, suitable for banking purposes, were accordingly installed. These fixtures were all designed and made by the pupils of Class 8A2. Each cage and window is properly set up in brass.

It is not only a savings bank. It is a "really truly" bank, where you may step in and cash a check, like any other honest citizen in any other worthy bank. You may draw checks on it, and promissory notes in the day of trouble.

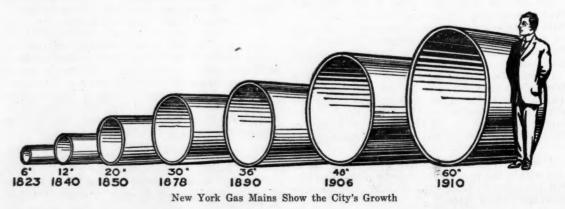
The boys have devised the following plan for rapid entry of deposits: Two facsimile cards are used, one pink, which is kept by the depositor; the other white, kept by the bank. These cards fold in the center, one side being used for deposits, the other for withdrawals. Each side of the card is printed in cents up to twenty-five dollars. When a boy makes a deposit he hands in his "pink" card to the receiving teller. This functionary takes the corresponding "white" card, places it on the top of the pink one and punches a hole thru the pair at the figures indicating the amount deposited. At the same time he announces the transaction to the clerks, who enter the account. Deposits are accepted from one cent up. On balances over and above fifty cents the depositor receives four per cent interest.

When deposits reach the sum of two dollars, the depositor may purchase a check-book and draw checks, which are honored by the bank to within

fifty cents of his fortune.

Any depositor who happens to be "temporarily embarrassed" may have his note discounted at the bank at the legal rate of interest, providing such note is guaranteed by a depositor in good standing. The president of the Yorkville Bank is taking an interest in the welfare of this school bank. When a boy's account has reached the grand total of five dollars, this sum is deposited in trust for the boy in the Yorkville Bank, thus establishing a nucleus of a fortune for the depositor. An adding machine company has presented the school bank with one of their \$100 adding machines. The bank is open for business from three to four o'clock p. m. on school days.

Turkey's government has placed with some cotton mill owners in Leeds, England, an order for about 1,500,000 yards of khaki cloth for the Turkish army. The contract is the largest placed for khaki since the Russo-Japanese war.



# Mathematics as a Live Interest.

By ANNA GILLINGHAM

Perhaps it is because geography and nature study largely represent science to the child in the grades that most of the correlated mathematics work which suggests itself seems to center in some way around these branches. It must be remembered that for long periods of time the geography course deals with topics which cannot be made to lend themselves to any numerical correlation. Then, at varying intervals, either because of the nature of the work or the sudden inspiration of the teachers, there comes a topic fraught with valuable quantitative possibilities.

Probably there is no time in the children's intellectual awakening when wilder excitement and enthusiasm prevail, and at the same time greater awe is manifested, than when, after some months of "home geography," the class is suddenly plunged in a few brief lessons into considering the immensity of the Solar System and regarding their world as merely one small planet with many others. Questions become riotous, the lethargic children suddenly wake up and for some days the regular progress of the planets around the sun, their one or many "moons," the amazing fact that not only other worlds larger than ours revolve about our sun, but that there are infinite numbers of solar systems,—these things are all-engrossing.

The great question usually is whether those other worlds are inhabited. Then the difficulties of determining this at so great a distance present themselves, and invariably comes the question, "But how do they measure those long distances which they can't reach?"

No better illustration could be found of the statement already made concerning the value of having had a reasonable explanation even tho the details are all forgotten. The process is made as simple as possible, using triangulation, very much as suggested in Ball's "Starland." The distance to an inaccessible object is measured.

Before this can take any hold upon the children's understanding, they must be given a clear idea of the meaning of angles and the necessity of measuring them, the use of a portion of the arc of a circle for this purpose, etc.

The difficulty here is that an angle is not a fixed size, but a fixed shape. ½ or ½ of a tiny circle is the same shaped piece as ¼ or ½ of a huge circle. That is, an angle of 90° or 60° is always the same, no matter how far the sides are extended. This part of the work takes time, the idea being lost again and again. But it is the feature which will be of permanent value, and this gained the rest is easy.

Next follow a few brief exercises in the use and reading of a protractor.

It is usually best to measure first the distance to an accessible object such as the globe suspended four or five feet above the teacher's desk. A visible base line is measured, two yard-sticks laid end to end being convenient. Instead of having the children sight from the ends of the base to the object, it has seemed helpful at first to outline the triangle before their eyes by a bright-colored string

Then, after these tangible angles have been measured with the protractor, a few minutes' practice is given in forming triangles with apex at several objects about the room by means of

imaginary lines, and then they are ready to take an object above their reach, sight the angles, construct a similar triangle on paper to a scale and find the distance.

As nothing is known of square root, the process is entirely one of accurate construction and scale work. If one inch represents one foot in the base of the triangle and the angles are accurately measured and constructed, the altitude of the triangle thus drawn will read in inches what the desired distance is in feet.

A fairly clear description of this is given in a child's own words.

HOW WE MEASURED THE DISTANCE TO AN OBJECT ON THE

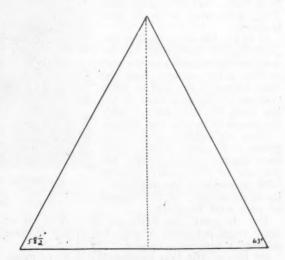
At school in geography class we had heard how many miles it was to the moon and the planets. We wanted to know how they measured the distance to any of these. One day at school in mathematics class we measured the distance to an object on the ceiling which we could not reach and so found out something the way people do it.

We started by taking a base line which was three feet from the ground and three feet long. We also drew on paper what we drew on the board, taking for our scale one inch for one foot. Then we took a stick and sighted to the object on the ceiling. After that we took a protractor and measured the number of degrees there were between the two lines, one being the base line, and the other being the line we had sighted along, and so forming an angle of 79 degrees on one side and 81 degrees on the other.

We drew these same angles on paper and extended the lines till they would meet. Then we measured the altitude, which was  $9\frac{1}{2}$  inches and would be  $9\frac{1}{2}$  feet on the wall. We added the 3 feet we had made our base line from the ground and so got the distance to the object on the ceiling,  $12\frac{1}{2}$  feet.

That is the way people measure the distance to the moon and planets, only they use very accurate instruments, and a very long base line and some calculations that are too hard for us to understand yet.

One class found the height of the school build-



ing with some help and after drawing a number of triangles of different scales so as to rectify their errors.

The same class begged to be taken to measure the width of the Hudson River in the same way, using the transit to ascertain the angles.

The diagram and photograph sufficiently explain themselves. In order that the experiment

Distance across Hudson.

200 ft. to 1 in.

I and I stations on New york shore
200 ft. apart. (1 in. on our diagram)

I station on Jersey shore to which we sighted.

Base angle at I 83½

Base angle at II 93°

Distance from I to base line 22 in.

200 ft. = 1 in.

400

400

4400 ft. = 22 in.

So it is 4400 ft across the Hudson. might be in any sense successful, the readings had to be taken by a teacher, but every child in the class was lifted up to take a look for himself so

as to see how it was done.

Last winter I was giving a little very elementary geometry to the class which two years before had done the above work under another teacher. When the protractors were put into their hands they held them awkwardly and had to be shown how to use them. But no one asked an ignorant question concerning angles, the possibility of measuring them, etc., i.e., the conceptions were all there. In a very short time they were doing good work with the protractors.

It is at this same time in the beginning of their study of the earth in its relations to the rest of the solar system, that the class begins to say and to write "million" with any other meaning than the next period after thousands in the decimal system.

They say glibly that a certain planet is so many million miles from the earth or that there are millions of other solar systems with no notion of the impossibility of conceiving the significance of such vast numbers.

For the past two years we have tried to let them work out some scheme for giving to "one million" a concrete meaning.

Of course, the first suggestions were to measure a line 1,000,000 inches long, to cut 1,000,000 pieces of paper (one child urged that they should be allowed to do this as their evening's home work), to get 1,000,000 people into a hall, etc.

After it was found that too much room or time would be needed for these methods the idea of counting things, e.g., horses on the way home, suggested itself.

As we could not all be together to share the wisdom thus gained, and several began to suspect that such a process would be a lengthy one, some child advised that we simply sit in our seats and count 1,000,000. This was tried for two minutes. The counting was aloud and most deliberate, why, I do not know, unless from the conviction that they had a big job on their hands.

At the close of two minutes 100 had been counted. It then occurred to one of those bright, lazy children, of the sort of material from which inventors are made, that we would count only 1,000 in twenty minutes, and thence the inspiration that by multiplying we could calculate the time.

The following was put on the board, largely at the dictation of the class:

1,000 counted by class in 20 minutes.

1,000

 $\overline{1,000,000}$  might be counted in 20,000 minutes.  $333\frac{1}{3}$  number of hours.

60 min.) 20,000 min.

13% number of days.

24 hrs.) 333 hr.

The next year the idea of drawing some length



Finding the Distance Across the Hudson with the Aid of a Transit Photograph by Lewis W. Hine

for a diagram suggested the use of a pencil, and it was a general class conclusion to make marks for one minute as fast as possible and calculate time needed for 1,000,000 from that. After a minute of intense silence and rapid

After a minute of intense silence and rapid strokes it was ascertained that the class had averaged 200 marks. From this the following was worked out:

200 marks made in 1 minute.

60

12.000 marks could be made in 1 hr.

288,000 marks could be made in 1 day.

1.008.000 marks could be made in 31/2 days.

The idea that in the one case they would have to count for 13% days and in the other make marks for 3½ days, steadily, with not a moment

to eat or sleep, made a strong impression.

The text-book statement that the diameter of the earth is about 8,000 miles and its circumference about 25,000 miles, is the first introduction that many children have to the relative lengths of these dimensions of a ball or circle.

On being questioned they see that the ratio is rather more than three, but are not certain whether this ratio would remain constant with all circles. Many incline to the belief that in the case of a large circle the ratio between the two would be greater than in the case of a small circle. It is the first conscious encounter with ratio versus difference.

Many circles are measured in school and out, and, the relation being determined to be slightly over three, they are given the number 31/7.

Here are two illustrations of the different uses to which such correlations may be put.

In the case of the triangulation, the function of the explanation was to throw light on another subject, and the details should be dropped at once. In the case of the ratio just cited, the exercise was the utilization of a practical point of departure for a mathematical principle soon to be needed. The ratio thus impressed by the experiment should never be allowed to slip again below the threshold of consciousness.

## Shadows

### An Exercise in Geography for Fifth-Year Pupils

By PRINCIPAL J. H. ROHRBACH, New York

"At twelve o'clock, just as you are leaving school, in which direction does your shadow fall? When the sun sets? When it rises?"

"When is your shadow longest? When is it shortest? Will you let some one measure your shadow in the morning and again at noon, and a third time after school is dismissed?

"Some boys used to work in the fields far away from everybody and they had no timepiece. How do you think they knew it was dinner time? They measured their shadows. As soon as they could step on the head of the shadow it was noon. I am sure they sometimes strained the stride."

"When is the sun highest, or farthest away from the horizon?"

A few observations will fix the fact that the sun reaches its highest point at noon, and that it seems to climb out of the east, up and up, then down and down again into the west. If these observations are distributed over the year, it will be noticed that the altitude of the sun varies at New York, approximately, from 73 to 26 degrees.

Pupils will readily see that shadows are longest when the sun is lowest, and vice versa.

The sun appears to travel from one tropic to the other and back again every twelve months. On September 21 and March 21 it is directly over the equator; it is over Capricorn on June 21 and on December 21 it is over Cancer.

Darken the room and substitute a candle for the Draw lines on the floor to represent the equator and the tropics. Place a pupil on each of these lines; should their shadows be inconveniently long, smaller objects may be used instead. The more of the human element, however, that can be injected the more effective the lesson will be. Pupils find it interesting to dress puppets in the costume of the people inhabiting the several localities in question. Trace with crayon the shadows of these pupils (or other objects).

"What is the shape of the shadow at the equator? At the tropics?

Drive home the dates when the sun is over the several lines represented on the floor.

Shift the candle to Capricorn. Trace with crayon the three shadows on the floor. Note the shape of the shadow under the candle. Mark the date

and place.
"What shape would the shadows of New York children assume at noon if the sun came north 41 degrees; that is, if it came directly overhead?"

After the exercise here outlined has been given. it is easy to stir up interest in the clever juvenile jingle:

> 'I have a little shadow That goes in and out with me, And what can be the use of him Is more than I can see.

It is very very like me From heels up to the head: And I see him jump before me When I jump into bed.

## Birthdays of Famous Americans

(Continued from the March number)

Thomas Jefferson—1743. Apr.

Apr. -Washington Irving-1783.

-William Ellery Channing-1780. Apr.

Apr. 12—Henry Clay—1777.

Apr. 15--John Lothrop Motley-1814.

Apr. 27-Samuel F. B. Morse-1791.

Apr. 28--James Monroe-1758.

May John James Audubon-1780.

May Horace Mann—1796.

May 25-Ralph Waldo Emerson—1803.

May 28-Jean L. R. Agassiz—1807.

May 29--Patrick Henry—1736.

June 24-Henry Ward Beecher-July Nathaniel Hawthorne-1804.

July David Glasgow Farragut-1801.

July 6-John Paul Jones—1747.

July 12-Henry David Thoreau—1817.

James Kent—1763.

Aug. 29-Oliver Wendell Holmes-1809.

# The Discovery of the Mississippi River

#### A Dramatization in One Act

By E. FERN HAGUE, New York

CAST

1. De Soto , 2. The Chief 4. First Soldier 5. Second Soldier

3. Louis de Moscos

6. Indians and Soldiers.

Scene.-On the bank of the Mississippi. Time.—Summer, 1641

Enter De Soto, followed by Louis and soldiers. The First and Second Soldiers are pulling by the arm two Indian captives who are laden with the effects of the

De Soto.-At last we have reached an open space.

Louis.-It is a relief after traveling thru dismal swamps and dense forests.

De Soto.—See! What a beautiful river! Louis.—It is the broadest I have ever seen.

De Soto.-Look on the chart and see where we are.

Louis.-We are hundreds of miles west of Florida. This river is not on our chart.

De Soto.—Then we are the first white men to behold it. I claim this river from mouth to source for Spain!

-Aye, for Spain! For Spain!

First Soldier.—Sir, close to the edge of the river are hundreds of Indians.

Second Soldier.—A canoe is nearing the shore. It carries an Indian chief.

Enter Chief, followed by Indians.

Chief .- Welcome, white man. De Soto.-Welcome, red man.

Chief .- Why have you come to the homes of the red man?

De Soto.-We have come from a land far up in the sky. We bring messages from the sun, the stars and the moon. The Great Spirit sent us to

Chief.—I do not believe you.

De Soto.—Look at me! I am no common man. I can do anything I wish and nobody can stop me. Chief.—If you can do anything, dry up this great river and I will believe you.

De Soto.-I do not wish to.

Louis.-Er-you-you see, the Great Spirit gave you this river. He would be angry if we

dried it up.

Chief.—Yes, we love the waters of our huntingground.

De Soto.—What do you call this great water? Chief .- If you were a messenger from the Great Spirit you would know what we call it.

De Soto.—I must confess that we did not come from the Great Spirit, but from a land far across

Chief.—Yes, I know you. Your people came from the east to the land of flowers and there robbed my people. You are Spaniards in search for gold. You love gold so much that you would kill the Indians for it.

De Soto.-We come as friends.

Soldiers.-Yes, as friends. Chief.—If this is so, we shall be friends.

De Soto and the Chief shake hands.

Chief .- This great river is the father of many smaller waters that flow from the land of the morning sun, the setting sun, and from the land of snows. We call it the father of waters or the Miss-iss-ipp-i.

De Soto.—We shall call it the Mississippi. Soldiers.—The Mississippi!

Chief .- Come, friends, and I will lead you to the wigwams of my people.

#### The Weavers of New York

The looms we visited are new in the city of Gotham. They are tapestry looms of a pattern unchanged after centuries of use. And the art of the weaver of these fabrics, we are told, is far too ancient for record.

The art we beheld is almost absolutely unaltered. The looms are installed in a studio place that was once a palatial stable. They are copies of what are known to the craft as the Aubusson looms of France. The men engaged in making tapestries upon this old device are foreign craftsmen, trained to their guild and wondrously skilled

It provided a singular sensation to leave the busy, noisy thorofare of modernity and ascend to that conclave of looms so allied to the past. There were two great apartments devoted to this en-ginery of beauty. Enginery seems the only adequate word. The looms we saw are combinations of huge wooden frameworks, beam-like levers, twining ropes, and tightening devices, the whole resembling those monstrous stone-heaving cata-

pults inseparable from ancient war.

Unlike the tapestry looms at the Gobelin workshops in Paris, these are made to stretch the warp horizontally, about waist-high to a man. At the rear of each loom, on a slanted bench, sit the weavers who work the design. Beneath the warp, and readily visible thru its many tight-stretched strands, the pattern lies close under hand. drawn on a monster sheet of paper and colored with painstaking skill. Above it bend the weavers of the cloth, each softly supported with pillows. One pillow to sit on and one on which to lean, each workman adjusts to his needs. His colors (the woofs) are wound on spools, and resemble a heap of large-sized, brightly colored and differently hued caterpillars, ready to spin out their substance. There are frequently as many as twenty or thirty of these shuttles beneath one workman's

It is wonderful and utterly bewildering to see these craftsmen weave. Their hands out-machine a machine as they grasp at the warp, to lift two, four, five, or any number of strands, shoot a bobbin in and out, and make a singular tie, to drop that particular caterpillar, clutch up another, tie in its thread, and pounce upon a third or fourth, and return, perhaps, to number one. They keep those red, green, gold, and purple caterpillars in a constant state of agitation. They grasp at the warp and play in a strand and finger new strings. as if the cords were the wires of some silent harp on which they play a ceaseless composition that expresses itself in color. Yet fast as their fingers seem to play upon this soundless instrument, it is slow, hard toil with eyes and hands, to stitch in those units of the scheme.—PHILIP VERRILL MIGHELS, in Harper's Magazine for May.

# Arbor and Bird Day

### How to Plant a Tree

1. Select first the tree best suited for your purpose, be that shade, ornament, fruit, production of lumber, wind break, or fence posts.

2. Bear in mind that the tree you are planting, if of proper species, may be a shelter for and a pride of future generations, or if wrongly selected, it may last but a decade.

3. The one advantage, that of rapid growths, should not decide what tree to plant. Innumerable insects, fungoid diseases, and the necessity for frequent pruning, besides a brief period of existence, may characterize the tree of your choice, and it should be discarded.

4. When there is slight opportunity for frequent watering, tree species demanding large quantities of water should be discarded. will be disappointing.

5. Elms, cottonwood and swamp maples are among the class requiring much water.

The oaks, ash, sugar maple, Norway maple, walnut, catalpa, etc., succeed with a moderate quantity of moisture.

6. Good roots in ample quantity are of vital importance to the tree's successful growth. In digging, spare not the labor, but secure all the roots possible without mutilation.

7. The top of a tree should not be mutilated. Cutting off the leading shoots is extremely bad practice, only to be tolerated with cottonwood and soft (swamp) maples.

8. Too large a tree should be avoided.

9. Keep the roots fresh and moist by wrapping in wet burlap while conveying them to the planting grounds.

10. Evergreens especially should be kept moist; when the resinous sap hardens from a few moments' exposure to sun and wind the tree is dead.

11. The larger the hole, more thoroly prepared the soil, the greater the care in planting, so much more satisfactory will be the growth and future development of the tree.

12. Grass sod is the deadly enemy of a newly set tree. No grass should be permitted within two feet of the trunk. The grass secures the first water which falls and in dry weather the trees suffer for want of moisture.

13. Digging the holes. A philosopher of the past century said, "The ground should be prepared the full extent of the field," which assertion has never been disputed. The hole should never be less than four feet square and eighteen inches deep. The soil, if not good quality, should be removed and good loam brought to fill the cavity. If of less size, the new roots strike the hard side of the excavation, which they cannot penetrate and are thus turned back, coiling about as in a flower-pot. It thus requires several seasons for the trees to secure a thrifty growth. No fresh manure should be placed near the roots, but well rotted compost, well mixed with a friable fertile soil, will produce

a surprising growth of tree.

The roots should be spread out in natural position without any crowding and fine earth sifted in from the shovel by a shaking motion, until all the roots are covered and the interstices well filled. When half-filled, a bucket of water may be slowly poured in and the hole filled. If the soil is dry and drainage good, the surface may be somewhat depressed to main-

tain water in dry season. If, on the contrary, drainage is not good, and soil inclined to be wet, then the surface about the tree had better be raised a trifle that the roots be not in too much water.-From Arboriculture.

### Arbor Day Program Hints

BEFORE ARBOR DAY

Be enthusiastic. Begin at once to arouse interest in Arbor Day.

Select trees and shrubbery and find out who will furnish flowering perennials such as blue flag, lily-of-the-valley, jonguil and narcissus.

Clean up the yard and have the ground for flowers made ready in time-a good, rich soil.

Have the holes dug for planting trees before Arbor Day.

Plat the ground and decide what would be the best plan for planting.

Try to get an old soldier to furnish and help plant a Memorial Tree.

A pretty custom is to name your trees in honor of authors, poets, statesmen, etc. Select names in advance.

For morning exercise give to the pupils an Arbor Day thought or talk or read to them some

#### ON ARBOR DAY

Provide plenty of good music.

Decorate the schoolroom with pictures of trees, birds, pretty flowers and pretty homes.

Whenever possible let the pupils decorate the schoolroom with their own work-such as their own drawings and paintings of birds, which may be pinned on long, narrow ribbons or strings and looped gracefully under and over blackboards, windows or on the walls.

Have Arbor Day blackboard poems and prob-

If possible arrange a bird corner. Specimens of nests may be kept from year to year. Hang nests on small branches. The Perry Pictures of birds are pretty for this corner, also pictures of streams and landscapes.

Give especial attention to poems, quotations, discussions and debates.

Have essays from individuals on subjects of their own selection.

Have reports from special committees to which have been previously assigned topics for investigation.

Stories reproduced by the pupils make a delightful change for programs.

Vote for State Tree and State Flower.

At close of indoor program have a short, unique impressive program out of doors at the planting of the tree; at the same time not forgetting our Arbor Days of other years'; but remembering them with an appropriate anniversary se-

Have a few citizens on program for special remarks, with one special speaker for an address. The program should be long enough to admit

variety, but not so long as to become wearisome. Love the trees, love the flowers, plant this love in the hearts of boys and girls and the result will be a great harvest of trees and flowers.-Kentucky Arbor and Bird Day Annual.

### At the Schoolhouse

#### CONCERT RECITATION

And now in the forest the woodman doth stand, His eye marks the victims to fall by his hand, And all the trees shiver and trerable for fear. Hark! they plead for their lives! will the woodcutter hear?

#### RECITATIONS-INDIVIDUAL

#### THE REECH

First Pupil-Oh, leave this barren spot to me! Spare, woodman, spare the beechen tree! Thrice twenty summers I have seen The sky grow bright, the forest green; And many a wintry wind have stood In bloomless, fruitless solitude, Since childhood in my pleasant bower, First spent its sweet and sportive hour, And on my trunk's surviving frame, Carved many a long-forgotten name, As love's own altar honors me, Spare, woodman; spare the beechen tree.

#### THE MAPLE

Second Pupil-

I am the maple. Oh, come this way on a hot July day, If my worth you would know; For wide and deep is the shade I keep, Where cooling breezes blow.

#### THE WALNUT

Third Pupil-

When the autumn comes its round, rich, sweet walnuts will be found

Covering thickly all the ground where my boughs are spread.

Ask the boys that visit me, full of happiness and glee.

If they'd mourn the walnut tree, were it felled and dead.

#### THE ELM

Fourth Pupil-

Each morning when thy waking eyes first see, Thru the wreathed lattice golden day appear, Here sits the robin, on the old elm tree, And with such stirring music fills the ear, Thou mightst forget that life had pain or fear, And feel again as thou wast wont to do When hope was young and joy and life itself were new.

#### THE OAK

Fifth Pupil-

I am the oak, the king of the trees; Calmly I rise, and spread by slow degrees; Three centuries I grow: and three I stay Supreme in state; and in three more decay.

#### CONCERT RECITATION

What do we plant when we plant the tree? We plant the ship which will cross the sea. We plant the mast to carry the sails; We plant the plank to withstand the gales; The keel, the keelson and beam and knee; We plant the ship when we plant the tree. What do we plant when we plant the tree? We plant the houses for you and me. We plant the rafters, the shingles, the floors; We plant the studding, the laths, the doors; The beams and siding; all parts that be; We plant the house when we plant the tree.

What do we plant when we plant the tree? A thousand things that we daily see. We plant the spire that out-towers the crag, We plant the staff for our country's flag. We plant the shade from the hot sun free, We plant all these when we plant the tree.

#### At the Trees

1. The planting of the trees.

2. Recitations.

First Pupil-

Plant blessings and blessings will bloom: Plant hate and hate will grow; You can sow to-day, to-morrow shall bring The blossoms that prove what sort of thing Is the seed—the seed that you sow.

Second Pupil-

When you have finished a building, or any other undertaking of the like nature, it immediately begins to decay on your hands; you see it brought to its utmost point of perfection, and from that time hastening to its ruin. On the contrary, when you have finished planting a tree, it is still arriving at greater degrees of perfection, as long as you live, and appears more delightful in each succeeding year than it did in the foregoing.
—Addison-Spectator.

Third Pupil-

Then rears the ash his airy crest, Then shines the birch in silver vest. And the beech in glistening leaves is drest, And dark between shows the Oak's proud breast. Like a chieftain's frowning tower. -Scott.

Fourth Pupil-

The groves were God's first temples, ere man learned To hew the shaft and lay the architrave And spread the roof above them, ere he framed The lofty vault to gather and roll back The sound of anthems; in the darkling wood

Amidst the cool and silence, he knelt down And offered to the Mightiest solemn thanks and supplications.

Fifth Pupil-

If I were a flower, I'd hasten to bloom And make myself beautiful all the day thru With drinking the sunshine, the wind and the rain.-

Oh, if I were a flower, that's what I'd be-Planting a tree on Arbor Day.

Sixth Pupil-

Joy to the thought of our own, own tree, Long may its branches shade our way!
This task shall ever our pleasure be—
Planting a tree on Arbor Day.

Seventh Pupil-

There in the wondering airs of the tropics, Shivers the aspen, still dreaming of cold; There stretches the oak from the loftiest ledges His arms to the far-away land of his brothers, And the pine-tree looks down on his rival, the palm.

Eighth Pupil-

Behold the trees unnumbered rise, Beautiful in various dyes; The gloomy pine, the poplar blue,

The yellow beech, the somber yew, The slender fir that taper grows, The sturdy oak with broad-spread boughs.

Ninth Pupil-

A glorious tree is the old gray oak;
He has stood for a thousand years;
Has stood and frowned on the trees around
Like a king among his peers.
As round their king they stand, so now,
When the flowers their pale leaves fold.
The tall trees round him stand array'd
In their robes of purple and gold.

Tenth Pupil-

Into the blithe and breathing air,
Into the solemn wood,
Solemn and silent everywhere;
Nature with folded hands seemed there,
Kneeling at her evening prayer;
Like one in prayer I stood.

—Longfellow. [Kentucky Arbor and Bird Day Annual.]

Interesting Facts About Trees

The costliest tree in the world is the plane tree growing in Wood street, London, England, occupying space which, but for its being there, would bring in a rental of \$1,500 a year, and this capitalized at thirty years' purchase gives a value of \$45,000.

The largest tree in the world is the great chestnut tree at the foot of Mt. Etna, which is called the "Chestnut Tree of a Hundred Horses," and is thought to be one of the oldest trees in existence. Five enormous branches rise from one great trunk, which is 212 feet in circumference. A part of the trunk has been broken away and thru its interior, which is hollow, two carriages can be driven abreast.

The largest fruit tree in the United States is a peach of the Crawford variety, standing on the farm of Allen Harris, in Kern County, Maryland. It measures 67 inches in circumference and 22 inches in diameter. Three of the limbs are 22 inches, 29 inches and 30 inches in circumference

respectively.

The largest white oak tree ever cut in the United States came out of Trumbull County, Ohio, a few years ago. It was delivered to a timber mill, and measured 62 feet in length and 7 feet thru, and contained 7,365 feet of lumber, board measure. It was located by Mr. Helman's buyers on C. K. Shipman's farm in Gustavus, Ohio, and \$100 bought it. The Helman company dressed the stick down to 30 x 39 inches, 62 feet long, and shipped it to New York, where it is now used as a dredge anchor.

One of Missouri's giant trees, felled on a farm near Laclede, a few years ago, had a diameter of 6 feet, and from it made 505 good fence posts and 15 big loads of wood. Its age was estimated as

240 years.

In Terre Bonne Parish, Louisiana, the largest orange tree in the South grows. It is 50 feet high and 15 feet in circumference at the base, and has often yielded 10,000 oranges per season.

An old giant tree is the largest apple tree in the State of New York. It stands near the town of Wilson, and was planted in 1815, its highest yield being 33 barrels of apples in a single season.

California is noted as a land of wonderful trees, and Mariposa Grove is known far and wide as "The Big Tree Country." "Wawona," sometimes called "The Tunnel Tree," has a roadway cut thru

the solid heart, which is 27 feet thru, 10 feet high and 10 feet wide. The Grizzly Giant redwood contains enough lumber to build a box that would inclose the Masonic Temple of Chicago. According to actual measurement the girth of this tree at a height of 5 feet from the ground is 98 feet 10 inches.

The most sacred tree in the world is probably the sacred bo. On the night of October 7, 1887, a terrible storm raging on the Island of Ceylon threw to the ground what probably up to that time had been the oldest tree in the world, the sacred bo of Ceylon. The oldest written description of this wonderful tree known to exist is that by Fa Hiam, a Chinese historian and traveler, who visited the tree in the year 414 A.D. It was then 702 years old, having been planted by King Devinpiatissa in the year 288, before our era began. If the above date is correct this bo tree was more than 2,175 years old when the storm ended its career on the first mentioned night.

Georgia has a quivering tree, so called because every limb, both large and small, on the tree, trembles as in fear, or as a suffering animal would quiver, and this occurs when not a breath of air is

stirring.

There is a tree in Persia designated as "The Sorrowful Tree." the first bud of which opens when the first star appears in the evening. As the night advances and the stars thickly stud the sky, the buds continue gradually opening until the whole tree looks like one immense white flower. dawn approaches, however, the Sorrowful Tree closes its flowers, and before the sun is fully risen not a single blossom is seen. A sheet of snowywhite flower-dust covers the ground around the foot of the tree, which looks withered and dead during the day, while, however, it is preparing for its next nightly appearance. The fragrance of the blossoms is like the smell of the evening primrose. If the tree is cut down close to the roots, a new plant soon springs upward and attains maturity in an incredibly short time. Near this curious tree there usually grows another, almost its exact counterpart, but less beautiful and blooming only in the daytime.

In the Canary Islands is a weeping tree, which is wet even in a drought, constantly distilling water in its leaves, while Arabia is noted for its famous laughing plant. The seeds of this plant produce the same effect upon persons as laughinggas. The plant grows from two to four feet high, with woody stems, wide-spreading branches and bright green foliage. Its fruits, yellowish in color, are produced in clusters. The flavor of the seeds, the size of a Brazilian bean, is a little like opium, and their taste is sweet, while the pods containing them are soft and woolly in texture. The seeds, when taken in small quantities, cause a man to laugh loudly, boisterously, and then he sings, dances and cuts all manner of fantastic capers. The odor of them, however, produces a sickening sensation, and is slightly offensive.

The musical, or whistling, tree is a native of the West Indies, Nubia and the Soudan. It possesses a peculiar shaped leaf, and pods with a split or open edge. The wind passing thru these causes the sound which gives to the tree the name of "whistler." In Barbadoes there is a valley filled with this variety of tree. When the trade winds blow across the island, a constant moaning, deeptoned whistle is heard from it. The Soudan possesses a species of acacia which grows very abundantly there and which the natives call the whistling tree.

In Central America has been found the electric

light tree, the milk tree, and the bread tree, the first of which gives a light so strong that a person can read or write by it at night. The milk tree has a thick, tough skin that can be used for half-soling shoes, and the tree is milked by boring a hole into the trunk, when it will let down sap as white and sweet as any ever milked from a cow. The bread tree has a solid fruit, a little larger than a cocoanut, which, when cut into slices and cooked, can hardly be distinguished from excellent bread.

In Africa has been discovered a tree that yields butter. While not as good as that churned from cream, it can be made somewhat similar in taste by salting. It is easily made into soap by heating with a solution of potash or soda.

The most important article for illuminating purposes in Japan is the candle made from the fruit of what is known as "the vegetable wax tree." The berries are a small pea-size, of a white color, hanging in clusters, and containing the wax as a thick white coating of the seed. To obtain the wax the berries are crushed, strained and pressed in hemp bags, or the bruised seeds may be boiled and the wax skimmed from the top.

An electrical tree grows in India, the leaves of which are so highly charged with electricity that whenever one is touched the individual investigating receives a shock that almost knocks him down. Even upon the magnetic needle this tree, scientifically known as philotcea, has a strong influence, causing magnetic variations at a distance of seventy feet. The electrical strength of the tree varies according to the time of day, being most powerful at noon.

A curious tree was discovered a few years ago by the well-known naturalist of Bavaria, Professor Schelwisch, in Africa, which is known as the iron tree. The leaves, altho very thin, are bent with great difficulty. In order to secure one a file must be used. The tree is a great metal eater, eagerly devouring any metal with which its roots may come in contact. It changes its color to the color of the metal last absorbed.

Newton, N. C., has a smoking tree. It is white mulberry, about thirteen years old, with a bushy top and many lateral branches. Puffs of smoke identical in appearance with the cigarette smoke are often seen starting from various parts of the tree, sometimes from the leaves, sometimes from the bark of the limb or trunk. The puffs are at irregular intervals, occasionally two or three at once, and again they are several seconds or half minute apart.

In Scotland, the poor man's hut is lighted by torches made by the Scotch fir. Owing to the resinous nature of the wood, this fir burns most brilliantly. In the barren parts of Sweden and Lapland the peasants select the oldest and least resinous of the branches, remove the bark, grind and mix with them meal and make into cakes called "bark bread."

The calabash tree grows in the islands of the West Indies and resembles our common New England apple tree in height and size. It has wedgeshaped leaves and large, whitish, fleshy blossoms that grow on the trunk and big branches. The fruit is somewhat like a common gourd, only a great deal stronger, and often measures 12 inches in diameter. The hard shell of this is cut in various shapes by the natives, and is rather handsomely carved. It is made into drinking-cups, dishes and pails.—Denver Republican.

# Trees and Shrubs About a School-

So much depends on the character of a location, that I hesitate about making suggestions as to the arrangement of trees and shrubs about a schoolhouse. A few general principles well known to every one who has had experience in such things, might, however, be given, leaving the rest to the taste of those having the planting in charge.

 Plant in clumps and curved lines, never in straight lines.

2. Leave an open vista in front of the building, or near it.

3. Avoid planting so close to the building as to exclude the light and so as to hold dampness during wet weather.

4. Plant trees of rapid growth, such as the soft maple, with more durable trees of slow growth, and cut out the former as the latter increase in size and demand more room.

5. Plant either in the fall after the trees become dormant, or in early spring before the leaves begin to appear.

6. Select young trees for planting. They bear transplanting better than old ones, start quicker, and will generally overtake larger trees planted at the same time.—H. GARMAN, Kentucky State University.

Teach me half the gladness
That thy brain must know,
Such harmonious madness
From my lips would flow,
The world should listen then,
As I am listening now.

-Shelley.

Winged lute that we call a bluebird,
You blend in a silver strain
The sound of the laughing water,
The patter of spring's sweet rain,
The voice of the winds, the sunshine,
The fragrance of blossoming things,
Oh, you are an April poem,
That God has dowered with wings.

#### Tree Riddles

1. What is the double tree? 2. What tree is nearest the sea? 3. What is the languishing tree? 4. What is the chronologist's tree? 5. What tree will adorn a lady's dress? 6. What is the tree that will hold the same? 7. What tree would you prefer on a very cold day? 8. The Egyptian plague tree? 9. The tree we offer to friends when we meet? 10. The traitor tree? 11. The most ancient tree? 12. The fiery tree? 13. The trees (two different ones) that we use in a storm? 14. The dandiest tree? 15. The tree to be kissed? 16. The level tree? 17. What is the tree in a bottle? 18. The fisherman's tree? 19. And the tree where the ships may be? 20. What is the tree that you pickle? 21. What is the tree that's immortal? 22. The tree that around fair ankles they bind? 23. What is the tree that is sharp? 24. What is the tree that we wear? 25. Which tree has passed thru fire?

Answers.—1. Pear. 2. Beech. 3. Pine. 4. Date. 5. Fringe. 6. Box. 7. Fir. 8. Locust. 9. Palm. 10. Judas. 11. Elder. 12. Burning Bush. 13. Rubber and Umbrella. 14. Spruce. 15. Tulip. 16. Plane. 17. Cork. 18. Bass (Basswood). 19. Bay. 20. Cucumber. 21. Arbor Vitæ. 22. Sandal (Sandalwood). 23. Bayonet (Spanish Bayonet). 24. Cotton (Cottonwood). 25. Ash.

-Selected.

### A Tree Alphabet

#### By HARRIETTE WILBUR, Minnesota

The teacher writes the alphabet on the blackboard, in regular order, where it can be easily seen. Each child then writes the name of the tree mentioned in his stanza after the correct initial letter. The name may be written before or after reciting, as desired. Do not have the trees come in correct alphabetical order, as this finding the place to write is a part of the fun. At the close of the fourth recitation, the alphabet will look as shown here:

A	Orange
B	P
Chestnut	Q R S T
	R
$\mathbf{E}$	S
D E F G	T
G	Ū
Hemlock	V
I	W
J	X
K	Yew
L	Z
M	&
N	

#### 1-HEMLOCK.

O hemlock tree! O hemlock tree!
How faithful are thy branches!
Green not alone in summer-time
But in the winter's frost and rime!
O hemlock tree! O hemlock tree!
How faithful are thy branches!

2—Orange.

Sing a song of the orange tree,
With its leaves of velvet green!
With its luscious fruit of sunset hue,
The fairest that ever were seen.
—J. K. HOYT.

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On England's pleasant shores, our sires
Left not their churchyards unadorned with
shades

Or blossoms. There the yew,

Green ever amid the snows of winter, told Of immortality.

4—CHESTNUT.

The chestnuts, lavish of their unhid gold,
To the faint summer, beggared now and old,
Pour back the sunshine hoarded 'neath her favoring eye.

—LOWELL.

5-LILAC.

I am thinking of the lilac trees,
That shook their purple bloom;
And, when the sash was open,
Shed fragrance thru the room.
—MRS. STEPHENS.

6-SPICE TREE.

The spice tree grows in the garden green,
Beside it the fountain flows,
And a fair bird sits the boughs between
And sings his melodious woes.

—JOHN STERLING.

7-QUINCE TREE.

Way down in the orchard stands A quince tree fair to see; All filled with blossoms—pink and white— As pretty as can be.

8-FIR.

A lonely fir tree is standing
On a northern, barren height;
It sleeps, and the ice and snowdrift
Cast around it a garment of white.

HEINE.

9-APPLE TREE

Come, let us plant the apple tree.
Cleave the tough greensward with the spade;
Wide let its hollow bed be made;
There gently lay the roots, and there
Sift the dark mould with kindly care,
And press it o'er them tenderly—
As, round the sleeping infant's feet,
We softly fold the cradle-sheet;
So plant we the apple tree.

-BRYANT.

10—XMAS. TREE (CHRISTMAS TREE).

The tree that I love the best,
It buds and blossoms not with the rest;
No summer sun on its fruit has smiled,
But the ice and snow are around it piled;
But still it will bloom and bear fruit for me,
My winter bloomer! my Christmas tree.

—Youth's Companion.

11-PALM.

-Longfellow.

-BRYANT.

The palm tree standeth so straight and so tall, The more the hail beats, and the more the rains fall.

LONGFELLOW.

12-VIBURNUM.

Viburnum is a pretty tree, Tho not so very tall; Another name we know it by; The old-fashioned snowball.

13—JUNIPER.

The juniper, or cedar tree,
Has wood of deepest red;
In making pencils it is used,
For all except the lead.

14—ELM.

Then hail to the Elm! the green-topped Elm!
And long may his branches wave,
For a relic is he, the gnarled old tree,
Of the times of the good and the brave.

15-Dogwood.

There is a very smallish tree,
With fruit so rich and dark;
I wonder if it's called dogwood
Because it has a bark?

16-MAPLE.

The maple puts her corals on in May,
While loitering frosts about the lowlands play;
To be in tune with what the robins say,
Plastering new log-huts 'mid her branches gray.

—LOWELL.

#### 17—KINNIKINNICK.

In June it is fragrant with clusters of small pink and white bells, much like the huckleberry blossom. In December it is gay with berries as red as the berries of the holly. So it is green and glossy all the year round—lovely at Christmas and lovely among flowers at midsummer.

—HELEN HUNT JACKSON.

18-BIRCH.

Give me of your bark, O birch tree! Of your yellow bark, O birch tree! Growing by the rushing river, Tall and stately in the valley! I a light canoe will build me, That shalt float upon the river, Like a yellow leaf in autumn, Like a yellow water-lily!

-LONGFELLOW.

19-WILLOW.

"Come, Pussy!" is the south wind's call—
"Come, Pussy! Pussy Willow!"
A fairy gift to children dear,
The downy firstling of the year—
"Come, Pussy! Pussy Willow!"

20-GUM TREE.

I sit where the leaves of my tree-friend—
Of the gnarled and knotted gum—
Are circling and drifting around me,
And think of the time to come.

-ALICE CARY.

21-NUTMEG.

The nutmeg tree so beautiful, Grows way beyond the sea; The kernel of its fruit is used To flavor food for me.

22-ZULU CHERRY.

I wonder if, in Zululand, The happy children cry: "Cherry ripe! Cherry ripe!"— Just like you and I? 23—INDIA RUBBER TREE.
Once upon a time, my dear,
Your little rubber shoe,
Was milky sap from a rubber tree,
In far-away Peru.

24—TAMARACK.

Give me of your roots, O Tamarack!
Of your fibrous roots, O Larch Tree!
My canoe to bind together,
So to bind the ends together
That the water may not enter,
That the river may not wet me!

-Longfellow.

25-RED OAK.

Sing for the oak tree,
The monarch of the wood!
Sing for the oak tree,
That groweth green and good.
—MARY HOWITT.

26-UMBRELLA TREE.

If caught out in a summer shower, How very nice 'twould be, To find a dry and sheltered bower, Beneath an umbrella tree.

27—& (AND SO FORTH).

"And so forth" is a forest green,
Of every kind of tree—
Walnut, linden, beech, and ash—
That I could name to thee.

# Memorial Day Quotations

Ah! never shall the land forget
How gushed the life-blood of her brave—
Gushed warm with hope and courage yet
Upon the soil they fought to save.

Your silent tents of green
We deck with fragrant flowers;
Yours has the suffering been,
The memory shall be ours.

-Longfellow.

These are souls of those who battled
For the right in ages past,
Gone to join the silent forces
Hov'ring o'er us to the last;
Gone to join the conquering legions
Which on fields immortal camp;
Onward thru the ceaseless ages
Shall this unseen army tramp.
—G. S. MARTIN.

Tears for the grief of a father, For a mother's anguish, tears; But for him that died for his country, Glory and endless years.

-W. D. HOWELLS.

Grave deep their memory on your hearts, Keep ye their country free; Live for the flag for which they died, This is their legacy.

-N. M. LOWATER.

Of the Blue or the Gray, what matter to-day!
For each one some fond heart weeps;
So children dear, make the spot less drear
Wherever a soldier sleeps.
—ILLINOIS MEMORIAL DAY ANNUAL.

Soldier, rest! Thy warfare o'er, Sleep the sleep that knows no breaking; Dream of battlefields no more, Days of danger, nights of waking.

They were the defenders of humanity, the destroyers of prejudice, the breakers of chains, and in the name of the future they slew the monster of their time. All honor to the brave! They kept our country on the map of the world, and our flag in heaven.

—ROBERT G. INGERSOLL.

Sleep, comrades, sleep in calm repose, Upon Columbia's breast; For thee with love her bosom glows; Rest, ye brave heroes, rest!

These are the flowers I love the best,
And I've brought them all to lay
With loving hands where soldiers rest,
On Decoration Day.
—SUSIE M. BEST.

Blest with victory and peace, may the heavenrescued land

Praise the Power that hath made and preserved a nation.

When war winged its wide desolation And threatened the land to deform, The ark then of freedom's foundation, Columbia, rode safe thru the storm.

This one fought with Jackson and faced the fight with Lee;

That one followed Sherman as he galloped to the

But they're marching on together just as friendly as can be,

And they'll answer to the roll-call in the mornin'!

—F. L. STANTON.

# MORRIS OFF.



MUSIC FOR MORRIS DANCE

# Exercise for Memorial Day

By a Southern Teacher

MARA L. FERGUSON, TENNESSEE

- Song .- "Columbia, Gem of the Ocean."
- 2. Origin of Memorial Day.
- Recitation .- "Memorial Day." 3.
- Song .- "The Red, White, and Blue." 4.
- Exercise by three pupils: Ulysses S. Grant.
- 6. Recitation .- "Martyrs."
- Song .- "The Flag of Our Union." 7.
- 8.
- Exercise.—"Appomattox."
  Exercise.—"Robert E. Lee." 9.
- Song .- "Star-Spangled Banner."
- 11.
- "A Foraging Party."

  Recitation.—"A New American Hymn." 12
- Salute the Flag.
- Song .- "America."

#### ORIGIN OF MEMORIAL DAY

After the close of the Civil War. James Ridpath resigned his position as correspondent for the New York Tribune and became Superintendent of Schools in Charleston, S. C. For years he had been interested in freeing the slaves and as army correspondent had been at Atlanta with Sherman, and at Washington with Thomas, and had been present when Lee surrendered to Grant. He was now interested in raising the freedom by means of an education.

Mr. Ridpath builded better than he knew when he began to talk with the little semi-outcast negro children about decorating the graves of their friends and defenders who fell in the fight for freedom. He had been talking informally, to a lot of negro children, when one of the girls said, "Let's all of us git a'mfuls an' a'mfuls of posies, an' jes' hide the graves from sight, till we can't see 'em agin nevah no more.'

Mr. Ridpath said that set him to thinking, and in a few days he announced to them that they could tell their neighbors and playmates everywhere that they would decorate all the graves on May Day, and all of them could bring as many flowers as they wished or could get.

The day came, and its general observance astonished no one more than it did Mr. Ridpath himself. Over ten thousand persons, with a full battalion of soldiers, participated in this first celebration of Memorial Day, which occurred on May 1, 1865, in Charleston, S. C. From that day the custom spread with great rapidity, and, in 1869, General Logan, commander-in-chief of the Grand Army of the Republic, changed the date to May 30.

#### MEMORIAL DAY

Now is the cleavage deep of North and South Well closed,—the years o'ercovered it as grass Softens and sweetens some place of drouth,

When comes the rain. Where common sorrows are, anger must cease: Sorrow and love remain while passions pass. What is a patriot? Not the man who swears: "My country, right or wrong," nor he who claims That sacred thing, yet like a dastard dares

To use her to his ends;

Nor yet the weakling, sore afraid to chide, For fear he seem untrue; the gap is wide 'Twixt empty mouthings and high manhood's aims. For higher, holier than the will of war, The will to love; now may the path of peace

Within our States, be like the pilot star In the night sky, by myriads to increase As the millennium broadens, gleam by gleam: This is the prophet's word, the poet's dream: All nations living in love's great release.

Nay, on this memorial ne'er forget The visioned good, the revelation august Of Peace betwixt the peoples; may we let Our martial mood be cleansed of any dust Of war, and this America clasp hands Close with the parent English—two proud lands Before the world who let their weapons rust. -RICHARD BURTON.

#### ULYSSES S. GRANT

First Pupil.—Ulysses S. Grant spent his boy-hood on a farm in the "woods" of Ohio. These woods contained plenty of nuts, fruits, sassafras, and so forth, besides two streams, both of which were good for fishing.

Besides the play Ulysses had plenty of work to do. His father was a tanner and was always busy, but this son did not like to work with leather. He loved horses and so was always happy when he could be at work on the farm.

The schools were very poor and so Ulysses acquired but little education in them. The teachers knew little more than the pupils and the text-books were very poor. Besides that, Ulysses had little taste for study. Fortunately, an education may go on out of doors as well as inside four walls, if the boy is earnest and ambitious.

As a boy, General Grant was never aggressive nor given to profanity. He never entered a fight without its being clearly the fault of the other boy. In childhood he was a sturdy little fellow, never boisterous. He had not that superabundance of animal spirits which impels many boys to "stand on their heads," yell vociferously, and do many other things from sheer thoughtlessness.

Second Pupil.—As Colonel Grant came out of his tent one morning the sentinel said, good-naturedly, "Howdy, Colonel?" Grant turned and, with a very stern tone, said, "Hand me your piece"; and upon taking it, faced the soldier and came to a "present arms" position; then handed back the musket, saying, "That is the way to say, 'How do you do' to your Colonel."

In speaking to an officer who was confident that the Southern army could whip General Grant and his army, General Longstreet said, "Do you know Grant?" "No," replied the officer. "Well, I do," said Longstreet. "I was in the corps of cadets with him at West Point for three years; I was present at his wedding; I served in the same army with him in Mexico; I have observed his methods of warfare in the West. We must make up our minds to get into line of battle and stay there; for that man will fight us every day and every hour till the end of the war."

Sherman said, "Grant always seemed pretty certain of winning when he went into a fight with anything like equal numbers. I believe the chief reason why he was more successful than others was that while they were thinking so much about what the enemy was going to do, Grant was think-

Third Pupil.—(Story as told by a child who saw General Grant review the Grand Army of the Re-

public at the Centennial.)

"We were not far from the balcony where General Grant reviewed the troops and therefore saw all that there was to be seen. A seemingly endless procession of soldiers, cannon, and brass bands passed. Probably not a building on the line of march was undecorated and many were draped in, bunting from roof to pavement.

"We, ourselves, were resplendent in red and blue ribbons. How the people cheered! But it puzzled us why the cheers were loudest and longest for the most forlorn, stained, and tattered old flags, until we understood that the flags, too, were vet-

"But, by and by, the great show was over and General Grant was going away. He did not seem

at all gay. I wondered why.
"'Didn't you enjoy it?' 'Wasn't it nice to see all your old soldiers there again?" we asked, child-fashion. 'But they were not all there,' he answered gravely. I realized what it had meant to him to review his old army. Those tattered flags had been carried by men who went to death at his

"To others it had been a day of jubilee, while his great heart had ached as he thought of the price of his victories. Afterwards I heard that he said to one who stood near him while his old troops filed past, one who had shared his experiences thru those terrible days and years, and who understood him and his emotions: 'Oh, the cost, the cost!"

#### MARTYRS

We bring a wreath, O martyrs numberless, Who perished that our country still might live! Who fought and bled, the unborn babe to bless, That we should still be brothers and forgive.

But now we come, not as in bygone years, When anger poisoned sorrow thru and thru. When no one cried thru blended love and tears, "Forgive them for they know not what they do!"

Thank God, those days are now forever passed, With all their strife of party, clique, and clan; The Northerner, the Southerner, at last Is simply, solely, an American.

-Selected.

#### APPOMATTOX-GRANT AND LEE

The surrender at Appomattox brings two great generals together, and if this were all we knew of them we should know they were great. General Porter tells the story. "The terms of the surrender had been written out and handed to Lee. After reading it carefully he said, 'This will have a very happy effect upon my army.'

"General Grant said, 'Unless you have some suggestions to make in regard to the form in which I have stated the terms, I will have a copy of the

paper made in ink and sign it.'
"'There is one thing I would like to mention,' Lee replied, 'The cavalry men and artillerists own their own horses in our army. I would like to understand whether my men will be permitted to retain their horses?' After turning to the 'terms' and a few remarks, Grant said, 'Well, the subject is quite new to me. Of course I did not know that any private soldiers owned their animals, but I think this will be the last battle of the war—I sincerely hope so—and that the surrender of this

ing, all the time, about what he was going to do army will be followed soon by that of all the others; and I take it that most of the men in the ranks are small farmers, and as the country has been so raided by the two armies, it is doubtful whether they will be able to put in a crop to carry themselves and their families thru the next winter without the aid of the horses they are now riding, and I will arrange it in this way: I will not change the terms as now written, but will instruct the officers I shall appoint to receive the paroles to let all the men who claim to own a horse or mule take the animals home with them to work their little farms.

"Lee replied, 'This will have the best possible ef-

fect upon the men.'

Lee's men were without supplies and General Grant sent provisions for 25,000 men. His message was, "The war is over and the rebels are again our countrymen."

#### ROBERT E. LEE

The real conditions under which the Civil War opened and was carried on are best understood when we know something of the life of some of the men who were leaders on the Confederate side. One of our Northern papers, one that is decidedly in favor of the Union side, has said that some of the Southern leaders were "beset by two conflicting high motives. That their choice to follow the high motive which kept them with their State was an error of political judgment, but not of moral judgment." It again says that "the test of patriotism, like the test of any other moral quality, is not success, but loyalty to conviction." ought to know something of the life of these men before we believe that they, at heart, were traitors.

The father of Robert E. Lee died when Robert was only eleven years old, so he was trained by his mother, to whom he was a most devoted son. His father had been a great statesman, and at one time was Governor of Virginia. He was a political

friend of Madison and Jefferson.

One of the teachers with whom Robert took his work when preparing for West Point says: "He was a most exemplary student in every respect. He was never behind time; never failed in a single recitation; was perfectly observant of the rules and regulations; was gentlemanly, unobtrusive and respectful in all his deportment to teachers and his fellow-students. His specialty was 'finishing up.' He gave a finish and a neatness to everything he undertook."

In West Point no breach of discipline nor any neglect of duty was ever charged against him during his four years of study. No unbecoming word ever fell from his lips; he was graduated second in his class. Manliness, true and noble, was stamped upon his very form and face. In West Point the text-books taught, with great distinctness, the absolute right of a State to secede and the primary duty of every man to his State. This position was held by the leaders of New England during the first half of the nineteenth century. As late as 1842 John Quincy Adams petitioned Congress for a dissolution of the Union. This question was debated for ten days.

From the time Lee graduated from Military School until the war began he was in the employ of the Government. After a hard struggle he decided to resign his place in the Union army and stand by his State. He said, "I look upon seces-sion as anarchy." He also said, "If I owned the four million slaves in the South I would sacrifice them all to the Union, but how can I draw the sword against Virginia, my native State?"

In a letter to his wife, written during the war, he said, "Tell Curtis he must consult his own judgment, reason, and conscience as to the course he may take. I do not wish him to be guided by my wishes or example. If I have done wrong let him do better. The present is a momentous question, which every man must settle for himself and upon principle."

#### A FORAGING PARTY

#### (A Scene During the War.)

"Late one soft, hazy afternoon near Christmas, 1864, we turned into the gate of a fine plantation near the Ogeechee River, quartered our horses and men in the barn and out-buildings where they proceeded to help themselves to what was neces-

"As the twilight deepened the rain began to fall, and Lieutenant Flint and I walked up the drive to the stately colonial home and asked for the shelter which courtesy restrained us from claiming. The only occupants of the house were an elderly man and woman and their daughter, a gentle-mannered and beautiful girl. We stood before them, two beardless youths in the hated blue uniforms of the Northern army; but the instinct of hospitality which never fails a Southerner prevailed, and we were invited to enter. A supper of cornbread, and excellent bacon, with a cup of coffee, broke down the barriers, and the despoilers became the guests of the despoiled.

of the despoiled.

"It was nearly midnight when the family retired to the upper part of the house, leaving us in possession of the hig parlor.

possession of the big parlor.
"We found it harder to sleep in that safe shelter than rolled up in our blankets under the open sky, and we sat long in the glow of the open fire and thought and talked of our Northern homes.

"As I dozed I saw the Lieutenant busy with paper and pencil. The dawn was just breaking when he read me these lines:

"'Where the savannas of the South Spread out their golden breaths to sea, The fearful tide of war has rolled, Around the lonely household tree.

"'I know the hearts that linger here,
Their broken hopes, their wounded pride,
Have felt what I may never feel,
Are tried as I have not been tried.

"'And here, before he seeks his rest,
The hated North-man bends his knee,
And prays, restore this household band—
As dear to them as mine to me;
Oh! let the fearful storm sweep by,
And spare this roof that sheltered me.'

"Rising, he opened the door of the old clock and laid the paper within, then we quietly left the house. The bugle broke the stillness of the early morning with the assembly call and we were soon on the open highway."

#### A NEW AMERICAN HYMN

Sound forth again the nation's voice To God who ruled the ancient days. His power will make our hearts rejoice Can we but tread our fathers' ways.

The sea that girds our land with blue,
The winds that make it wave with wheat,
Are witnesses forever true
That strength and freedom here shall meet.

Strike down the bars of pride and scorn; Lead up the lowly, shield the pure, And be a nobler nation born To dare, to shelter, to endure.

Until the people all shall find,
'Mid strife of votes, 'mid jar of tongue,
The peace that gladdens all mankind,
The love that keeps us ever young.

Where'er our starry flag may wave,
Far as our nation's rule may span,
Let one firm purpose, true and brave,
Bind all to God, and man to man.
—Harper's Weekly.

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#### The Mother of a Soldier

The mother of a soldier—hats off to her, I say!
The mother of a soldier who has gone to face the fray;
She gave him to her country with a blessing on his head—
She found his name this morning in the long list of the dead:

"Killed-Sergeant Thomas Watkins, while leading on the rest,

A Bible in his pocket and a portrait on his breast!"

The mother of a soldier—she gave him to her land;
She saw him on the transport as he waved his sunbrowned hand:

She kissed him thru the teardrops and she told him to be brave:

Her prayers went night and morning with her boy upon the wave.

The mother of a soldier—her comfort and her joy,
She gave her dearest treasure when she gave her only
boy:

She saw the banners waving, she heard the people cheer; She clasped her hands and bravely looked away to hide a tear.

The mother of a soldier—Ah! cheer the hero dead And cheer the brave who battle 'neath the banner of their creed;

But don't forget the mothers, thru all the lonely years, That fight the bravest battles on the sunless field of tears.

Nay, don't forget the mothers—the mothers of our men, Who see them go and never know that they'll come back again;

That give them to their country to battle and to die, Because the bugles call them and the starry banners fly.

The mother of a soldier—hats off to her, I say!

Whose head is bowed in sorrow with its tender locks of gray.

She gave without regretting, tho her old heart sorely bled When she found his name this morning in the long list of the dead:

"Killed-Sergeant Thomas Watkins, while leading on the rest.

His dear old mother's portrait clasped upon his hero breast!"

-Folger McKinsey, in Baltimore News.

#### Character of the Happy Warrior

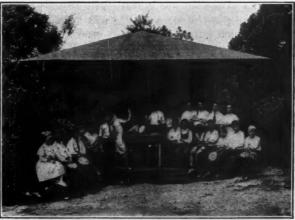
Read by Dr. Henry Van Dyke, at the funeral of Grover Cleveland.

Who is the happy Warrior? Who is he That every man in arms should wish to be-It is the generous Spirit who, when brought Among the tasks of real life, hath wrought Upon the plan that pleased his boyish thought: Whose high endeavors are an inward light That makes the path before him always bright: Who, with a natural instinct to discern What knowledge can perform, is diligent to learn; Abides by this resolve, and stops not there, But makes his moral being his prime care; Who, doomed to go in company with Pain, And Fear, and Bloodshed, miserable train! Turns his necessity to glorious gain; In face of these doth exercise a power Which is our human nature's highest dower; Controls them and subdues, transmutes, bereaves Of every bad influence, and their good receives: By all objects, which might force the soul to abate Her feeling, rendered more compassionate; Is placable,-because occasions rise So often that demand such sacrifice; More skilful in self-knowledge, even more pure, As tempted more; more able to endure, As more exposed to suffering and distress. Thence, also, more alive to tenderness. -'Tis he whose law is reason; who depends Upon that law as on the best of friends; Whence, in a state where men are tempted still To evil for a guard against worse ill And what in quality or act is best, Doth seldom on a right foundation rest, He labors good on good to fix and owes To virtue every triumph that he knows. Who, if he rise to station of command, Rises by open means; and there will stand On honorable terms, or else retire, And in himself possess his own desire; Who comprehends his trust and to the same Keeps faithful with a singleness of aim; And therefore does not stoop, nor lie in wait For wealth or honors, or for worldly state; Whom they must follow, on whose head must fall, Like showers the manner if they come at all: Whose powers shed round him in the common strife, Or mild concerns of ordinary life, A constant influence, a peculiar grace; But who, if he be called upon to face Some awful moment to which Heaven has joined Great issues, good or bad for humankind, Is happy as a Lover; and attired With sudden brightness, like a Man inspired; And, through the heat of conflict keeps the law In calmness made, and sees what he foresaw; Or if an unexpected call succeed, Come when it will, is equal to the need: He who, though thus endued as with a sense And faculty for storm and turbulence, Is yet, a soul whose master-bias leans To homefelt pleasures and to gentle scenes; Sweet images! which, wheresoe'er he be, Are at his heart; and such fidelity It is his darling passion to approve; More brave for this, that he hath much to love:-'Tis, finally, the Man, who, lifted high, Conspicuous object in a Nation's eye, Or left unthought of in obscurity,-Who, with a toward or untoward lot, Prosperous or adverse, to his wish or not,-Plays, in the many games of life, that one Where what he most doth value must be won.



Whom neither shape of danger can dismay Nor thought of tender happiness betray; Who, not content that former worth stand fast, Looks forward persevering to the last, From well to better, daily self-surpast; Who, whether praise of him must walk the earth Forever, and to noble deeds give birth, Or he must fall, to sleep without his fame And leave a dead, unprofitable name—Finds comfort in himself and in his cause; And while the mortal mist is gathering, draws His breath in confidence of Heaven's applause: This is the happy Warrior; this is he That every Man in arms should wish to be.

-Wordsworth.



A Playground School of Citizenship, at Washington, D. C.

### **Desert Companions**

[GRADES V TO VIII]

By LILLIAN C. FLINT, Minnesota

Nowadays people are advised to take the desert air, as they take the waters at a watering-place. It is, indeed, a cure for most ills. We were to bathe in it, to inhale it, to be soaked in it, until we would radiate it like a furnace.

Our headquarters were in Central Arizona, where the sun came up like the glare from the mouth of some great furnace. All about us lay a bewildering array of cliffs, and peaks, gaunt, white, much like the Alps if these were picked bare of all flesh and reduced to a bare skeleton of rock.

It was not so sterile, nor did the barrenness commence all at once as we went on our way. There was a margin of scattered scrub under the mountains. The parched bushes held on to life with a desperate tenacity, and adopted all kinds of queer shifts for treasuring up a little moisture and making their foliage sunproof. But they turned wan and gray in the effort. They were images of silent despair. Their stems were thin and shriveled and their leaves exuded particles of salt.

The verdure of the place, to mock by that name the wiry tufts and bitter shrubs, looked almost lifeless as the burning sand and blackened rocks.

We were conscious for the first time in our lives of the meaning of the word light. The glare seemed mineralized and came down to the earth all around, yellow and crystallized. We felt as if we were saturated with light, penetrated by light, as if we lived and breathed in it as a fish lives and breathes in water.

Everything that was heavy and opaque in us seemed burnt away and the body and mind to possess more energy and alertness. The light seemed to have physically nourishing and sustaining qualities. Our meals were few and scanty, there was no need to run one's own generator when we could draw supplies from the main station.

There is an extraordinary exciting and stimulating effect of the desert climate on one hand, and a lack of anything definite and substantial on the other. The stimulus that breathes in the air is addressed to the nerves and senses, not to the mind. If a twig rattles, or a stone clicks, your ears shout a message to you as if it were a gunshot. But for the most part, in the desert, the senses lead an idle life, and for want of other occupation we set ourselves to watch the animal life that existed in this scantily provided place.

Among the few signs of life was an enormous beetle which left, in crawling, a wee trail in the soft sand. This trail I one day followed up until I came upon the poor pilgrim itself. Its progress of a few yards an hour was in such pathetic contrast to the infinite space around it. The tiny feet that at every step dislodged a few grains of sand and sent them rolling down the slope, the crooked knees, the bent head, the broad back, the hunched shoulders, the boorish, plodding gait, seemed a suggestion of impenetrable prejudice and bigotry.

Under a bit of hard sand it crept, and laying its eggs, crumpled up itself, in a discouraged manner, and lay motionless, its lifework done.

Up from a dune one day came a tortoise. He had selected the desert for his home, like many of his species, and his dull brown hue matched his

environment. He had a deep burrow into which he retired during the day, for wonderful to relate three or four inches deep the sand was well packed and his burrow was the same shape as he was. This tortoise soon became so tame that he would eat out of our hands, taking a share of such food as we had with us, and exhibiting an inordinate fondness for canned corn, crunching the kernels and lapping the juice. He ate any fresh leaves that we could find for him, and would come into the house and crawl about the floor, back and forth, one of his favorite routes being over my feet.

Another of our visitors was the lizard. His life was practically in the night, and when the long shadows cast their purple on the sand, he came to inspect us. He looked like a wee alligator, and he had some variety of color, being spotted and banded with yellow and brown. I caught one in my hand; he gave out a squealing sound and tried to bite my fingers. He had wonderful toes, which were flattened, adhesive disks and enabled him to run up the almost vertical sides of our tent with great swiftness.

We found that some of these lizards changed their color, but not in the way that one usually imagines from the color of the substance on which they lay. When they were afraid they were bright green. Most of the time the lizards were of a rich brown color.

These lizards generally slept in a fallen tree, and it was interesting to see them get their breakfast. One of them would see a large, tempting fly, and slink forward close to the bough until it was near its victim, then make à dash, catch the prey and crunch it with sharp little teeth. The lizard ate only insects and would not touch worms.

It daintily lapped the dew from the vegetation by way of a drink, and then its breakfast was over.

For his other meal, this lizard came to depend on what we threw out. A bit of banana skin gave him much pleasure, and a green lettuce leaf, celery or any juicy fruit did not come amiss.

Every morning came a desert lark, a pale dovecolored little thing, with black marks on wings and tail. It had a clear, melancholy call, and liked to sit on the topmost twig or grass tuft and there utter its low cry. Every now and then it would go thru a curious performance, shooting straight upward some yards into the air and then pitching over and coming down head first.

The nights were extraordinarily cold compared with the great heat of the day, for the sand, light and porous, radiates away the heat as soon as the sun's rays are withdrawn.

The cold seemed still and piercing in the steely glitter of the moonlight. But, whether it was the way we lived, or the wholesome, pure air, the misery of getting up was wholly obliterated. With the opening of the eyes sleep had vanished. We woke as the animals wake, to full consciousness of everything around us.

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#### Scatter the Flowers

[Air-"Tenting on the Old Camp Ground."1

We come with gifts of flowers sweet For each dear soldier's grave; We'll cover the mounds where they

gently sleep, Those boys so true and brave.

#### CHORUS

Many are the boys who are sleeping for ave

Under the sod and dew:

Many are the hearts sending love today

To those brave boys in blue. Scatter the flowers, scatter the flowers,

Over the soldiers' graves.

Scatter the flowers, scatter the flowers.

Over the soldiers' graves.

We'll honor the graves of our soldier dead.

Who heard their country's cry, Who left their homes and fought and bled

And died for liberty.

We'll bring them to-day the violets

And roses red and white. Those colors bright they bore so true, For God and home and right.

-ADA SIMPSON SHERWOOD.

I chop de cotton, An' I hoe de cohn, All troo de day Fum de early mohn. De cotton am ripe An' de cohn am hoed, De pickin' am white, An' de shuckin' am go'd.
I chop de cotton,
An' I hoe de cohn,
All troo de day Fum de early mohn.

#### Prague Hams

Consul Joseph I. Brittain, of Prague, sends the following account of the method employed by Bohemian establishments in curing hams for export:

hemian establishments in curing hams for export; At present there appears to be a disposition on the part of the dealers in Prague hams to increase the sale of that product in the United States. For years past these hams have been sent to the United States in small lots, to be consumed by patrons of the better class of restaurants and hotels as a sort of delicacy. The sales have been made in the winter season, as the method by which the hams have hitherto been prepared would not permit their being shipped long distances during warm weather.

By subjecting the hams to a coating of material known as "mrasolin," invented by a Prague butcher, it is claimed that they may be shipped to the warmest climates and remain perfectly fresh almost indefinitely. Mrasolin is sold in thick sheets, is as pliable as rubber, and light in color. It is melted in a vessel placed inside another vessel containing boiling water, similar to the method employed in melting glue. When the material has been thoroly melted the hams are immersed and then hung up for five or ten minutes, during which time the coating thoroly hardens. They are then packed in boxes or large baskets ready for shipment. About 6 to 8 ounces of the liquid adheres to each ham, making an air-tight covering. The mrasolin can be peeled from the ham almost as easily as the skin from a banana.

easily as the skin from a banana.

It is claimed that all meats, eggs, and butter can be equally well preserved by the application of a coating of mrasolin. The material is said to be harmless and tasteless, and in addition to its preserving qualities keeps out all sorts of dirt and other foreign substances.

The Prague hams, which have a great reputation for tenderness and fineness of flavor, are taken from animals about 8 to 10 months old, and must each be inspected by the city veterinary before reaching the hands of those who make a business of curing them.

These hams are first salted in large vats, then placed in specially prepared ovens, where they are subjected to beechwood smoke for ten to twelve hours. It is also claimed that the flesh is treated by some secret method which gives the fine flavor. The hams, after having been smoked, are hung up in cool cellars, where they remain until sold. Many of the small preservers of meat fill their cellars with ice, building a solid wall adjoining the place where the meat is kept.

There are in Prague and adjacent districts 1,138 establishments, which annually cure about \$4,872,000 worth of such hams. The wholesale price of the ham is about 21 cents per pound, while the retail price when boiled is 61 cents, and when sliced 81 cents per pound.

#### **Books Received**

Allen, William H.—Civics and Health—Ginn & Co. Bailey, L. H.—Beginners' Botany—The Macmillan Co. Barrett, B. S.—Book of Homonyms—Isaac Pitman &

Birdseye, Clarence E.—The Reorganization of Our Colleges—The Baker Taylor Co.

Burstall, Sara A.—Impressions of American Education in 1908—Longmans, Green & Co.

Coe, Fanny E.—Coe's School Reader—Third and Fourth Grades—American Book Co.

Dana, Richard Henry.—Two Years Before the Mast—

The Macmillan Co.
Dickinson, Thomas H.—The Plays of Oliver Goldsmith—

Houghton, Mifflin & Co.
English History Stories—Chas. E. Merrill Co.

Emerson, Ralph Waldo.—Education, An Essay—American Book Co.

Foltz, El Bee Kean.—The Federal Civil Services as a Career.—G. P. Putnam Sons.

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Giese, W. F., & Cool, C. D.—Spanish Anecdotes—D. C. Heath & Co.

Greenough, J. B., & Kittredge, G. L.—Cicero, Six Orations with Vocabulary—Ginn & Co.

Hatfield, Henry Rand.—Modern Accounting—D. Appleton & Co.

Hoadley, George A.—Physical Laboratory Handbook—American Book Co.

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### Notes of New Books

"Human Body and Health—Elementary," by Alvin Davison, Professor of Biology in Lafayette College, is based on the idea that study of physiology should lead to the conservation of health. In place of general statements, specific facts and full explanations are given, showing how disease is caused, and how it can be prevented. The construction and workings of the various parts of the body are explained, and instruction is given, which helps the pupils to understand the care of the body, and the true value of fresh air, proper food, exercise, and cleanliness. Practical questions follow most of the chapters. The effects of alcohol and tobacco on the health of the growing child are discussed. Price, 40 cents. (American Book Company, New York.)

"Speaking and Writing," Book One, by William H. Maxwell, Emma L. Johnston and Madalene D. Barnum, is arranged for third-year pupils. The first part consists of story-telling, dramatization, games, drills on sound formation, and the study of poems and pictures. The second part is composed of lessons in both oral and written composition, with the emphasis placed upon the written work, the exercises including practice in sentence forms, paragraph construction, and the composition as a whole. In both parts the material has been selected with the idea of interesting children and inspiring them to spontaneous expression. Price, 20 cents. (American Book Company, New York.)

"German Literature, Land and People," by Franklin J. Holzwarth, Syracuse University, is intended to give a concise view of the German people, their land and literature. Introductory chapters describe the early civilization and history of the Germans. A sketch of the literature follows, with outlines of the great works. An appendix treats of the language, the geography, the government, industries, and education, a list of idiomatic expressions,

and tables of money, weights, and measures. Price, \$1.00. (American Book Company, New York.)

"Coe's School Readers," by Fanny E. Coe, teacher of English in the Boston Normal School. These books offer much new, fresh and interesting material, including stories of adventure, of humor, of child life, of animal life, of chivalry, etc. They will appeal to the teacher as well as to the pupil. The books are carefully graded, and correlation is kept in view by such an arrangement of the selections as secures the greatest possible unity of impression. The illustrations are numerous and most attractive. Price, 40 and 50 cents. (American Book Co., New York.)

Bunyan's "Grace Abounding" has a double significance to students of literature of the seventeenth century. The work has not hitherto been accessible in a form suited to the needs of students. It is now presented unencumbered by annotation, but is preceded by a careful essay on Bunyan's style and followed by questions for study of the text. Price, 35 cents. (Ginn & Co., Boston.)

"Soil Fertility and Permanent Agriculture," by Prof. Cyril George Hopkins, of the University of Illinois, is written primarily for American landowners, who must either think and plan for the preservation of the land or allow its more extended ruin, and secondarily for other students of agriculture and economics, whether in the lecture-room and science laboratory or in the business and social world. It is a gratification to bring before the public so important and fundamental a book. The author is an authority in his field. His work is certainly marked by an earnestness and enthusiasm that must inspire the reader. The subject he treats lies at the bottom of our national prosperity. More and more it must be studied with care and taught with thoroness in every school where agricultural instruction is given. (Ginn & Company, Boston.)

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"German Verb Blank," by Robert J. Kellogg. In this blank the author has succeeded in combining conciseness and transparency with practical completeness for all purposes of verb drill. The blank may be used: (1) to outline the conjugation of a verb by the inflection of tenses; (2) to give a simple synopsis, either of principal and derived parts, or of moods and tenses; (3) to conjugate or synopsize compound, reflexive, or passive verbs as well as active verbs; (4) as a guide to drill. (Ginn & Company, Boston.)

Heyse's "Anfang und Ende," one of the texts, is indorsed by the Committee of Twelve for use in schools and colleges. Its plot is laid in German territory and not, as are many of Heyse's works, in Italy. The style and diction of the tale is so simple that it is well suited for early reading in the classroom, and the present edition is especially arranged with that end in view. The notes and vocabulary are adapted to the grade of beginners in German. The German questions intend to furnish a basis for some conversation on the text. The English exercises are so arranged that they enable the teacher to drill German idioms. (Ginn & Company, Boston.)

"The Life of William Shakespeare—Expurgated"—by William Leavitt Stoddard, brings together seventy-odd pages of valuable material bearing upon the little that is known of the master poet-dramatist. The book is readable and interesting and is sure to interest pupils in the personal side of Shakespeare. It belongs in every school library, as well as in the library of every teacher and student of English. (W. A. Butterfield, 59 Broomfield street, Boston.)

The "Life of Horace Mann," by George Allen Bubbell, is a study in leadership. It holds a position midway between the Life and Works in five large volumes, and the short sketches of Horace Mann. The book has been pre-

pared with great care. Books, manuscripts and interviews with those who have known Mr. Mann, all have contributed to make this study of the great educator accurate as well as interesting. The style is simple and strong, and the book is certain to be standard. Price, \$1.50. (William F. Fell & Co., Philadelphia.)

"The Æneid of Virgil," translated into English verse by Theodore C. Williams, is a new book that will interest teachers of the classics, and all who cherish fond memories of the ten months' struggle with the "Arma virumque cano." The poem is translated into excellent and most enjoyable blank verse, and is certainly one of the best English translations of Virgil that have been made, if not the very best. The book is illustrated with a map, and several photographic reproductions. Price, 75 cents. (Houghton, Mifflin Co., Boston.)

Mrs. Gaskell's "Cranford," and selections from Irving's "Bracebridge Hall," have recently been brought out in the Riverside Literature Series. The edition of "Cranford" is especially interesting because of the photographic reproductions of houses and scenes mentioned in the story. The illustrations are seven in number, including a portrait of the author. The introduction, biographical and explanatory, adds much to the value of the book. The price of "Cranford" is 40 cents (cloth), that of "Bracebridge Hall," 25 cents. (Houghton Mifflin Co., Boston.)

A comprehensive study of "Eusapia Palladino and Her Phenomena," by Hereward Carrington, is timely and interesting in connection with the wide advertising the Italian "medium" has received during her visit to this country. Mr. Carrington gives a sketch of the woman's life, and reviews of the experiments made by numerous savants abroad. In the light of recent statements made by Dr. Hugo Muensterberg, teachers will enjoy reading this book. (B. W. Dodge & Co., New York.)



# The Gulick Hygiene Series



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The Normal College conducts a Physical Training Teachers' Bureau; registration restricted to graduates (1868-1910).

#### Decoration Day

Yes, scatter flowers above the graves Where the nation's dead are sleeping,

To tell that comrades, left behind, Their memories green are keeping. 'Tis many a year since they marched forth,

All the battle's perils braving, And many a year above their graves

Has the long green grass been waving.

Yes, scatter the flowers—'tis a kindly thought—

Pale lilies and fair red roses,
With lavish hands o'er the graves
where each

Brave soldier in peace reposes. Long years have passed since they sank to rest,

'Mid a nation's bitter mourning, But their faithful comrades, year by year.

Bring flowers for their graves' adorning.

But far away upon hill and plain, Nameless, forgotten, are lying

The bones of many who bravely fought,

In their country's service dying. But the their graves are unknown, unsought, Our dear Lord covers them over With the sweetest flowers and the greenest grass,

And blossoms of scented clover.

And instead of the muffled beat of drums,

Its saddening memories bringing,
The only sound that the silence breaks
Is the note of some wild bird singing,

Or a rush of timid, rapid feet,
As the wild gray rabbit passes,
Or the drowsy hum of the honey bee
As it flits among the grasses.

But peacefully still at rest they lie, And little it matters whether Alone they sleep in their nameless

graves,
Or in churchyards close together;
For a grateful country in its heart
Is fresh their memory keeping;
So scatter flowers with generous hand

Where a nation's dead are sleeping.

—JOHN VANCE CHENEY.

There is a destiny which makes us brothers—

None goes his way alone; All that we send into the lives of others—

Comes back into our own.

—EDWARD MARKHAM.

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"I have found the book surprisingly good. It is clear in definitions, plain and direct in illustration, and much more simple than most Algebras.

"The problems are the simplest and most sane I have seen in any book. The things mentioned in the problems are in most cases within the experience of the average pupil and so are truly concrete. When a pupil does not understand the things mentioned in a problem it is abstract to him. A few of the problems should be worded differently. I call the book excellent."—O. I. WOODLEY, Supt. of Schools Passaic, N. J.

University, Va. July 29, 1909.

B. F. JOHNSON PUBLISHING COMPANY
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No. 23

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# Pennsylvania Railroad

RULLETIN

#### SUMMER TRIPS AFAR AND NEAR

Summer days are coming fast, and vacation time suggests itself to young and old alike. In a few weeks school will close; teacher and pupil will lay aside book and pencil, and the annual exodus to country, seashore and mountains will have begun.

Already the cry is:—"Where shall we go this summer? To the old and tried resort we have visited year after year; or shall we try a new place?"

The Pennsylvania Railroad's Summer Excursion Book contains descriptions of nearly eight hundred of the leading resorts of the United States and Canada.

Chief among these are the forty beaches of New Jersey, which combine the best to be found in resort attractions. New Jersey's seacoast is a pleasure ground not equalled anywhere in the world.

Atlantic City, Cape May, Wildwood, Ocean City, Sea Isle City, Anglesea, Stone Harbor, Holly Beach, Avalon, Beach Haven, Sea Side Park, Island Heights. Point Pleasant, Sea Girt, Spring Lake, Belmar, Ocean Grove, Asbury Park, Allenhurst, Elberon and Long Branch are names too well known to need description of their many charms.

The Summer Excursion Book, to be issued early in May, describes these and other resorts, gives lists of principal hotels, and quotes rates of fare from principal stations on the Pennsylvania Railroad.

Twenty-five cents in stamps sent to Geo. W Boyd, General Passenger Agent, Broad St. Station, Philadelphia, Pa., will bring a copy of this valuable work to you postpaid when issued. Better send for it.

### Teachers' Agencies

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The School Bulletin Agency, C. W. Bardeen, Syracuse, N.Y.

## TEACHERS WANTED FOR SEPTEMBER

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#### MEETINGS TO BE HELD

May 3-5—County Superintendents Convention of State of Washington, Pullman.

May 5-7—Eastern Art and Manual Training Teachers Association, Bos-

Annual Congress of the Playground Association of America, Rochester, N. Y.

June 14-17—West Virginia State

June 14-17—West Virginia State
Association, at Charleston.
June 14-17—North Carolina Association, at Ashville.
June 20-22—West Virginia State
Association, at Charleston.
June 28-30—Ohio Teachers Association

ciation at Cedar Point.

June 29 to July 1—Pennsylvania
State Educational Association, at

Erie. July 2-8-National Education As-

sociation, at Boston.

August 2-7—Third International Congress of School Hygiene, Paris,

October 27-29 — Vermont State Teachers Association, at Rutland. December 27-30—Florida Educa-tional Association, at Pensacola.

Wenatchee, in the State of Washington, dedicated recently a new high school erected at a cost of over \$75,000. The town is situated in a rich fruit country. Mr. J. H. McGohan is the principal of the school.

Indignant Customer—I want to return this jewel box. It's not ivory, as represented.

Dealer (musingly)—Now, I wonder if it can be possible that elephant had false teeth?—Cleveland Leader.

### National Hymn

[Tune-"America."]

I love thy inland seas, Thy capes and giant trees, Thy rolling plains;

Thy canyons, wild and deep, Thy prairies' boundless sweep,

And rocky mountains steep, Thy fertile mains. Thy domes, thy silvery strands,

Thy Golden Gate that stands Afront the West.

Thy sweet and crystal air, Thy sunlight everywhere,

Oh, land beyond compare, I love thee best.

-DR. VAN DYKE.

# IN SUNNY COLORADO

If you want a home in one of the finest truit districts of the country, where conditions are ideal, or if it is necessary that you secure a home in sunny or if it is necessary that you secure a home in sunny Colorado for the health of some member of your family, then you should know about Morrisania Ranch, Grand Valley, Colo.

Some friends of The Fruit-Grower and myself thave bought this entire ranch of more than 800 acres. We would be the control of the first for sale. This land has been cut up into tracts of approximately ten acres each, and the price is \$300 per acre. Including perpetual water right.

Fruit-growing is work requiring brains, and rewards are very great. Orchards near Morrisania produce over \$1,000 works of fruit per acre. and bearing ornhards soil for from \$2,000 to \$4,000 per aboving that it is ideal for fruits and for a homeolimate is ideal, with almost \$90 days of sunshine a year; water is melted snows from mountains back of the land; seenery is beautiful. An ideal community of good people is being built up. Ten acres of this land will provide a handsome income, and is enough for a family. We will plant your orchard and care for it for flw years, and you can continue come." Write for beautiful booklet describing this ranch and explaining our proposition to build up an ideal community. JAMES M. IRVINE, Editor The Fruit-Grower, Box E-12, St. Joseph, Mo.

#### The Meaning of the Day

Do you know what it means, you boys and girls

Who hail from the North and the South?

Do you know what it means

This twining of greens

Round the silent cannon's mouth:

This strewing with flowers the grassgrown grave;

This decking with garlands the statues brave;

This planting of flags All in tatters and rags; This marching and singing; These bells all a-ringing;

These faces grave and these faces gay;

This talk of the blue and this talk of the gray

In the North and the South, Memorial day?

Not simply a show-time, boys and girls.

Is this day of falling flowers,

Not a pageant or play,

Nor a holiday

Of flags and floral bowers;

It is something more than the day that starts

War memories a-throb in veteran hearts;

For across the years,

To the hopes and the fears,

To the days of battle,

Of roar and rattle-

To the past that now seems so far away.

Do the sons of the blue and the sons of the gray

Gaze-hand clasping hand-Memorial day.

For the wreck and the wrong of it, boys and girls.

For the terror and loss as well,

Our hearts must hold

A regret untold As we think of those who fell.

But their blood, on whichever side they fought,

Remade the nation, and progress wrought.

We forget the woe; For we live and know That the fighting and sighing, The falling and dying, Were but steps toward the future-

the martyr's way! Adown which the sons o fthe blue and

the gray Look, with love and with pride, Me-

morial day.

-Boston Transcript.

Best and Realth for Mother and Child. Hest and Health for Mother and Child.

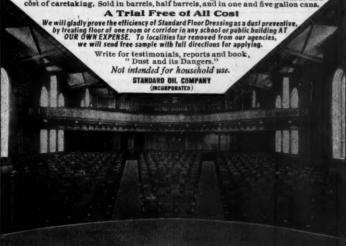
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#### **Hygienic Importance of Dustless Conditions in School Buildings**

The problem of preserving hygienic conditions in school buildings is one that deserves the serious attention of those responsible for the health of pupils under their care. Ample ventilation and scrupulous cleanliness are vital, but, unless the floors receive proper attention and treatment, the dust that accumulates will be a constant menace, for dust is recognized as the greatest carrier and distributer of disease germs known. A simple yet effective treatment of floors is found in

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## New York University Summer School

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Courses by sixty specialists, representing thirty departments.

For bulletin, address: G. C. SPRAGUE, Registrar, New York University.

#### A White House Remington Demonstration

Before a keenly interested audience of the stenographic and secretarial members of the White House force, a thorough demonstration of the Remington new model 10 was given in the business offices of the Executive Mansion on March 23. This demonstration was in charge of Mr. Raymond P. Kelley from the New York executive offices of the Remington Typewriter Company, who had with him as demonstrator Mr. E. G. Wiese.

Demonstrations were given ranging in speed from 100 to 200 words per minute. On memorized matter, Mr. Wiese nearly reached the 200-word-aminute mark, and came very close to 100 words a minute while at the same time carrying on a conversation. He Before a keenly interested audience

100 words a minute while at the same time carrying on a conversation. He copied matter from one of the Presi-dent's messages at the rate of 104 words a minute. The interest aroused by the demonstration of the new No. 10 Remington Typewriter may be gauged from the fact that about two hours were consumed in writing and in answering questions put by those who witnessed the demonstration.

#### Call of the City

I've got to get back to the city, My room where the trolley line

curves; With "L" trains o'erhead every minute

That act like a dope on my nerves.
I want to hear fire bells ringing,
The rattlety-bang of the street,
Where hawkers of fish and of berries
Their cries for more business re-

I yearn for a wheezy hand-organ, The blare of an almost brass band; To hear the kids screech their enjoyment

And scoot at the copper's command. I wish for a racket of some kind, I'd stand for a neighborhood fight; Some drunks could sing under my

window "It Looks Like a Big Night To-night."
Ungrateful? Well, maybe you've got

me.

me.
The country is surely some fine;
But lying awake in the stillness,
No. thank you, not any for mine.
The katydids, frogs and the crickets
With chorus, with solo or glee,
May hit the real lovers of nature—
No lullaby in it for me.

I've got to get back to the city, So tired am I, I could weep;

I must have the soothing surroundings Wherein I may sleep, sleep, and

sleep.
-L. D. G. BENTLEY, in New York

Teacher-Bessie, name one bird that is now extinct.
Little Bessie—Dick.

-Dick? What sort of a Teacherbird is that?

Little Bessie—Our canary. The cat extincted him.—The Presbyterian.

#### The Stitch in Time

When people begin to lose appetite, or to get tired easily, the least impru-

dence brings on sickness.

The stitch in time that saves nine is
Hood's Sarsaparilla taken now.

This great medicine enjoys the same distinction as a preventive that it does as a cure, which is saying a great deal. for never before in the history of medical science has so much thought been given to preventive medicine as is being given now.



# Bausch & Lomb **BH4** Microscope

is unquestionably the most suitable model ever offered for school work, for it represents the best and latest thought in scientific microscope construction.

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